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MINISTRY OF AGRICULTURE

MONTHLY REPORT

JULY, 1936

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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

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MINISTRY OF AGRICULTURE

MONTHLY REPORT

JULY, 1936.

It is satisfactory to record the fact that as a general rule the prospects for this season's agricultural crops have improved very considerably of late. Growth, which had been retarded by the cold and dry weather conditions experienced up to the third week of June was stimulated by the moister and warmer atmospheres that have since prevailed, and most crops have almost completely recovered from the earlier setbacks.

Whilst the present unsettled weather is, to say the least, most disconcerting for haymaking, farmers should not overlook the fact that the rains and heat are conducive to the rapid spread of blight disease in potatoes and to the growth of weeds, and they should take the necessary steps to keep them in check.

The prospects of the fruit crop in Northern Ireland this season are reviewed in this issue on page 8. More detailed particulars are supplied in this instance than heretofore, and the latest information to hand as to the crops of apples of the Bramley's Seedling variety in England and Wales is also supplied for the information of orchard owners.

A further article on the milk industry, having particular regard to supplies for creameries, will be found on page 12. This comprehensive survey is included to show the rate of expansion of the industry brought about by the Milk and Milk Products Act (Northern Ireland), 1934.

The most important legislative developments of recent date affecting agriculture in Northern Ireland have been the passing of the Marketing of Eggs Act (Northern Ireland), 1936, and the decision of the British Government to extend the existing temporary arrangements for granting financial assistance to the live stock industry under the Cattle Industry (Emergency Provisions) Acts, 1933 and 1934, for a further period and to introduce a long-term live-stock policy.

A summarised account of the provisions of the Eggs Act appears on page 17, and a notice regarding the forthcoming election of members, to represent classes A and B of the licensed wholesale dealers, on the Egg Marketing Committee, is published on page 25.

Detailed particulars of the Cattle Subsidy are given on page 27.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st JULY, 1936.

Although some rain fell at intervals in the early part of June, the showers, being slight and infrequent, made but little impression on draught-stricken pastures and crops, particularly in light soil areas, and since there was no improvement in temperatures growth continued slow. This rather variable and cool weather lasted until the end of the third week of the month when heavy thunderstorms swept the country, and following the torrential rains, the temperatures rose to a more seasonal level. Thundery conditions continued up to the end of June, and following this spell of moist and warm weather, the growth of pastures and crops improved at a rapid rate. The heaviest rainfall fell on the 23rd of the month, and while there were fairly heavy rainfalls also on the last two days of June, the intervening period was comparatively dry and much warmer than previously. During the thunderstorms several cattle were killed by lightning, and flooding occurred from the heavy rains.

The cutting of first crop hay which had commenced in some areas, was interrupted by the broken weather, and although the much needed moisture and heat arrived too late to make any considerable improvement in the yield of the hay crop as a whole, second crop hay, and permanent meadows, particularly in late districts, should benefit considerably from the recent stimulus to growth.

All corn crops have made rapid growth during the last week of June, as did also the potato and root crops, and the likelihood of satisfactory yields is much more probable than could have been anticipated earlier this summer.

Pastures which were in a very backward state at the beginning of June improved at a rapid rate during the last ten days of the month. Grass lands are now in good condition and providing adequate keep for stock, but with the sudden stimulation of growth pastures, in general, have reached the flowering stage very rapidly.

With the welcome change brought about in the position of pastures stock owners are enjoying considerable relief from the anxiety of providing food supplies from the almost exhausted stocks of last season's hay. Purchased foodstuffs continued to be in steady demand throughout June and prices had a firmer tendency at the close.

Store cattle which received hand feeding during the first three weeks of June continued to make a satisfactory thrive, but those entirely dependent on pastures for sustenance are, in most cases, backward for the time of the

year, despite the fact that grass was more plentiful in the last week of the month. Sheep and lambs also made a slow thrive during the cold and dry spell. Cattle being fed for beef had to receive liberal rations of concentrated foods on the pasture, and it may be stated that the general grazing of live stock did not commence until much later than usual.

THE CROPS.

WHEAT.—Winter and spring varieties of wheat made rapid growth especially towards the end of June, but ripening is expected to be a little late this season in many areas.

The general appearance of the crops at this stage suggest that fairly satisfactory returns may be obtained.

OATS.—This crop, which was also in a backward state at the commencement of last month, made very rapid growth towards the close, and it is generally considered that the yield will be fully up to normal dimensions. Heavy crops are anticipated on strong, loamy soils, but on light soils the straw is likely to be rather short. Charlock was prevalent in many crops and spraying was carried out in numerous instances.

Dwindling supplies of last season's crop of white oats were marketed in June and prices were a shade easier on the month at 5/5¼ per cwt. The average price for June, 1935, was 6/1¼ per cwt.

BARLEY.—The barley crop, on the whole, is now in a very satisfactory condition, having made considerable progress in growth during the last week of June. The heavy rains caused lodging in some crops.

FLAX.—Flax crops, many of which had a stunted appearance at the beginning of June and were generally making slow progress, recovered very rapidly since the arrival of moist and warm weather. Although the crops now look healthy and thick the produce may be rather short as flowering took place before the wet and warm weather arrived. Late frosts damaged some fields of flax and others were badly tossed during the thunderstorms, but on the whole the prospects of good yields are considered fair.

Smaller supplies of flax were marketed at Ballynahinch and Omagh during last month and prices eased further from 7/2½ in May to 6/9½ per stone in June. The range of prices at markets last month was from 5/- to 7/9 per stone.

POTATOES.—Growth has been rapid of late and good yields of early and main crop varieties are anticipated.

Late frosts during the first week of June did considerable damage to the plants in certain districts. The cold dry weather and the checks to growth by frosts have tended to delay maturity.

In some districts early varieties such as Ballydoon and British Queen have been dug with satisfactory results.

Although no reports of the appearance of blight were received up to the end of June, farmers have commenced the spraying of their crops. This wise precaution is being taken in view of the prevalence of moist warm weather which is most favourable to the appearance and spread of the disease.

Small supplies estimated at about 5% of the entire crop of last season's potatoes, remain on farms.

Quantities of potatoes marketed for local consumption during June showed a further reduction on the month, and prices which had a firmer tendency during the second week declined steadily from that date onwards. The following were the prices at markets during the past six weeks :—

Week ended.	Average prices per cwt.					
	Main Crop, all classes.		Arran Victory.		Kerr's Pink.	
	s.	d.	s.	d.	s.	d.
6th June, 1936 ..	2	9¾	2	9½	2	8½
13th „ „	3	2½	3	3	3	0¾
20th „ „	2	10	2	8	2	11
27th „ „	2	7¾	2	6½	2	9
4th July, „	2	6¼	2	6	2	7½
11th „ „	2	6	2	5½	2	7

Supplies of this season's crop of early potatoes arrived on the Belfast markets last month and prices, which opened at from 20/- to 24/- per cwt. for small lots, fell rapidly as increased quantities were offered, and for the week ended 11th instant they averaged 6/1 per cwt. as compared with 6/11 the previous week and for the corresponding week of last year. Compared with a year ago the quantities of new potatoes marketed this year were considerably smaller, illustrating further the lateness of the season.

Shipments of potatoes from Northern Ireland ports to Great Britain increased steadily during the first fortnight of June and then declined rapidly. The following were the quantities shipped during the six weeks ended 4th instant compared with the corresponding weeks of 1934-35 season :—

Season 1935-36.		Season 1934-35.	
Week ended :—	Tons :—	Week ended :—	Tons :—
30th May ..	3,675	1st June ..	5,168
6th June ..	5,442	8th „ ..	2,311
13th „ ..	7,666	15th „ ..	2,272
20th „ ..	5,753	22nd „ ..	2,851
27th „ ..	2,383	29th „ ..	1,799
4th July ..	682	6th July ..	1,218

The prices per ton paid to growers by shipping merchants last month showed that with a slower trade there was an easier tendency right through the month. The prices paid during the week ended 27th June ranged as follows :—

	Bagged	Loose
Up-to-Date (Red Soil) } .. .. Arran Consul }	£3 0 0	—
Arran Victory	£2 5 0 to £2 10 0	£2 0 0
Kerr's Pink	£2 10 0	£2 5 0

MANGELS.—Growth was slow in some areas but, in general, this crop was not unduly affected by the drought. Late frosts did some damage to the brairds, but since the rains and heat the crops have made excellent growth and are now very promising. Thinning was completed before the end of the month.

TURNIPS.—Early sown crops of turnips have made a marked improvement with the moister and warmer weather of late June and are in a fairly satisfactory state. Late sown fields suffered some damage from frosts and attacks of the "fly", and in some instances re-sowings had to be carried out. All crops are now making rapid growth and there are bright prospects of good yields.

HAY.—The cutting of first crop hay was commenced earlier than usual but was soon interrupted by the heavy rains which, had they fallen earlier, would have effected a considerable improvement in yields. The yields generally are likely to be light but some very good crops are being cut in certain districts. Second crop hay and hay growing in late districts have benefited to some extent from the rains and heat, but here again yields are expected to be below the average. The undergrowth has been stimulated but the quality may suffer from over-ripeness.

The returns from seeds hay also will be adversely affected by the unseasonable weather experienced up to the middle of June.

Somewhat smaller supplies of last season's hay crop were marketed last month as compared with May, and with the steady demand for fodder occasioned by the continued backwardness of pastures up to the third week of June prices were firmer on the month. First and second years' (upland) hay improved in price by 1/5 to 66/5 per ton as compared with a month ago, and meadow hay was 2/- dearer than in May at 52/- per ton.

LIVE STOCK.

CATTLE.—Store cattle made little thrive during the first three weeks of June and, with the exception of those animals which received hand feeding, were in a backward state for the time of the year. Cattle being fattened on grass also made slow progress until the last week of June. Dairy stock are in fairly good condition and the health of the herds is normal. The milk yield, which was slightly depressed owing to the cold weather and the lack of rich grass, has shown a good recovery of late.

Supplies of store cattle at fairs last month were slightly larger, and trade on the whole slower, although good quality stock showing condition remained in steady demand at late rates. Beef cattle also were in larger supply, and although trade was quieter than of late a good business was transacted at easier rates. Dairy cattle were little changed in supply and there was a better enquiry in this section for nice young cows.

SHEEP.—Sheep and lambs are in fair to average condition. The health of the flocks is generally satisfactory but maggots made their appearance early this season and have proved troublesome during the recent hot, showery weather.

Larger supplies of fat lambs were a fairly steady trade at slightly cheaper rates, whilst sheep, which decreased in number, were a slower trade at lower prices.

PIGS.—Larger numbers of young pigs experienced a steady demand and prices were firm on the month and ranged from 22/- to 45/- and averaged 31/6 each.

Sows for breeding were little changed in supply and demand. Prices ranged from £6 to £12 per head, according to quality.

HORSES.—Trade for horses was slightly quieter. Good young draught horses were selling at from £30 to £70 each, best types of farm animals from £30 to £50, and others from £20 to £30 each.

Milk.—The milk yield, which had been affected by the unseasonal weather, increased towards the end of June, and is now about normal for the time of the year. Creameries paid from 2½d. to 4½d. per gallon for milk delivered during June, the separated milk being returned to the farmer.

The average price paid during the month of May for milk produced in Northern Ireland and delivered to creameries for manufacturing purposes was 3.80d. per gallon, and the Ministry has made equalisation payments at 1.20d. per gallon in order to bring the average price in respect of this month to 5d. per gallon as provided by the Milk and Milk Products Act (Northern Ireland), 1934.

It should be noted that under the Regulations creameries are required to distribute the equalisation payments in accordance with the butter-fat contents of the milk received from each supplier. Farmers should, therefore, bear in mind that the actual payments made to them, being calculated on a butter-fat basis, may be at a rate per gallon which may vary below or above the average figure herein notified.

THE MARKETS DURING JUNE.

Home-grown vegetables at markets last month continued rather short of requirements, with the exception of pamphrey, which increased in supply and was 5d. dearer than in May at 2/- per dozen. Leeks were in slightly smaller quantity and 2d. dearer at 6¼d. per bunch, and decreased supplies of parsley were 6d. cheaper at 8½d. per bunch. A small lot of cauliflowers marketed at Belfast at the beginning of June was quoted at 5/- per dozen, whilst parsnips and garden turnips disappeared from the markets earlier. Farmers' butter was rather more plentiful than a month ago, and prices were a shade cheaper at 1/1¼d. per lb. for print, and 11¼d. per lb. for lump butter. Supplies of eggs at markets continued to decrease. Hen eggs improved further in price by ½d. to 6½d. per lb., and duck eggs by 3d. to 7/3¼d. per 120. In the poultry markets chickens were rather more plentiful than in May, but hens and ducks were less numerous. Prices recorded a slight reduction. Chickens were 3d. cheaper at 2/5 each, hens 1½d. cheaper at 1/7½d. each, and ducks 3½d. cheaper at 1/7½d. each. Increased numbers of ducklings were marketed during the month, and prices cheapened slightly and ranged from 2/- to 3/6 and averaged 2/8½d. each. Wool was marketed in increasing quantities during June, and average prices were higher than at this time a year ago at 6½d. per lb. for long unwashed, and 5½d. per lb. for mountain unwashed wool.

THE COST OF LIVING INDEX FIGURE.

The cost of living index figure at 1st June, 1936, was 44, or the same as that for the previous month. The figure at 1st June, 1935, was 40.

FRUIT CROP PROSPECTS. 1936.

Although the weather during the past winter was very severe and afforded fewer opportunities than usual for outdoor work in orchards, fruit growers managed to get pruning and spraying operations and necessary renovations done in good time. In fact, it would appear that more attention was given to orchards this season than formerly, as the higher prices obtained for the fruits of last season's crop were a great encouragement in this direction. All fruits were in a promising state in the early spring and more especially tree fruits, such as apples. Unhappily, however, very cold unseasonable weather during April caused an appreciable amount of damage to tree and bush fruits in low lying orchards, and strawberry plantations also suffered from the severe ground frosts and the harsh northerly and easterly winds in these areas. Apple trees on low lands and in exposed places which were full of bloom were badly hit by the frosts and cold winds, and the Bramley's Seedling variety appears to have suffered the most damage. In a few instances practically all the flower buds on trees of the Bramley's Seedling variety were killed. The setting of the fruit on trees of this variety elsewhere was adversely affected to varying degrees. Frosts and cold winds continued up to the beginning of June and caused a general setback to the prospects of a good yield of apples this season. Gooseberry and blackcurrant bushes also suffered from the cold winds and frosts, and a fair proportion of young fruits were killed in this way.

The absence of rain and heat was accountable for the backwardness of the fruit crop at the beginning of June, but since the arrival of rain and more seasonable temperatures in the second half of the month all fruits have made rapid development. The general position of the fruit crop in Northern Ireland may therefore be briefly described as having shown considerable improvement recently and fair to average crops are now anticipated.

Tree Fruits.—The prospects for the apple crop this season are on the whole less satisfactory than at the corresponding date a year ago. The principal variety "Bramley's Seedling", suffered most from the frosts and cold winds, and while the trees in most orchards at present are in a fairly satisfactory state the yield of fruit is likely to be below the average. The variety " Grenadier " is in a slightly more promising state, as are other cooking varieties such as "Royal Codlins" and "Royal Jubilee". The dessert varieties of apples may give slightly higher than average yields, although here again the reports are less encouraging than a year ago. Accounts of the other tree fruits such as damsons, plums, pears, and cherries, show that while considerable damage was caused by the cold winds and frosts, to damsons and plums in particular, the yields will be fully up to average in dimensions.

Bush Fruits.—Among the soft fruits raspberries are the most promising, as strawberries which were in a promising state at the beginning of June have suffered considerably from the recent heavy rains. On the other hand blackcurrants and gooseberries, which were only in a fair way at the beginning of June, have improved, and although blackcurrant mite and American gooseberry mildew are prevalent in some plantations there should be a fair return of good clean fruits in most districts.

Insect and Fungoid Pests.—Winter and summer spraying has been carried out on a larger scale throughout the country than in former years, and this, together with the drought in the early part of the season, has helped in keeping down the spread of fungoid pests, but since the wet weather set in they have spread rapidly. The majority of growers, realising the necessity of spraying to schedule, used tar oil distillates and Bordeaux mixtures recommended by the Ministry as preventatives; in many cases, however, these have been used as a cure and their application was made too late to have had any marked success. Among the pests at present causing orchard owners some concern are winter moth caterpillars and apple aphides, whilst American gooseberry mildew, blackcurrant mite, cane spot and mosaic disease in some varieties of raspberries, are also prevalent.

The table on page 10 shows the detailed position of the principal fruits grown in Northern Ireland.

County.	APPLES.				OTHER TREE FRUITS.				BUSH FRUITS.			
	Cooking Vegetables.			Dessert Varieties	Damsons	Plums	Pears	Cherries	Straw-berries	Rasp-berries	Black-currants	Goose-berries
	Bramley's Seedling	Grenadier	Others									
Antrim ..	F. to A. (G.)	F. (F. to G.)	A. (G.)	A. to G. (A. to G.)	F. (P.)	F. to A. (F.)	A. to G. (A.)	G. (G.)	A. to G. (A.)	A. (G.)	A. (V.G.)	A. (V.G.)
Armagh ..	F. (F.)	F. to G. (G.)	A. (A.)	A. (A. to G.)	A. to G. (P.)	F. to A. (F.)	A. to G. (F.)	A. (A.)	A. (G.)	F. (G.)	F. to A. (A.)	F. (G.)
Down ..	F. (A.)	F. (A.)	F. to A. (G.)	F. (G.)	A. (P.)	A. (G.)	A. (A.)	F. to A. (G.)	G. (F. to A.)	G. (G.)	F. (A. to G.)	F. to A. (G.)
Fermanagh ..	G. (G.)	F. (G.)	A. (G.)	G. (G.)	(G. (A.)	G. (F.)	A. to G. (G.)	A. to G. (G.)	G. (G.)	G. to V.G. (G.)	F. (V.G.)	G. (V.G.)
Londonderry ..	F. (F.)	F. (A.)	A. (A.)	A. (G.)	F. (P.)	A. (A.)	A. to G. (P.)	G. (F.)	A (G.)	G. (A.)	A. (G.)	A. (G.)
Tyrone ..	F. to G. (A.)	A. (G.)	F. to G. (A.)	A. (A.)	G. (P.)	G. (F.)	G. (F.)	G. (F.)	A. (A.)	G. (G.)	F. (G.)	A. (V.G.)
Northern Ireland	F. to G. (A.)	F. to G. (A. to G.)	A. (A. to G.)	A. (G.)	A. (P.)	A. (F.)	A. to G. (F. to G.)	A. to G. (F. to G.)	A. (A.)	G. (G.)	F. (G.)	A. (V.G.)

Abbreviations :—V.G.—Very Good. G.—Good. A.—Average. F.—Fair. P.—Poor. V.P.—Very Poor.

The letters in brackets relate to the position of last year's crop at the corresponding date.

The information given in this report has been compiled from statements received from the principal fruit-growers in Northern Ireland to whom the Ministry hereby acknowledges its grateful appreciation. Detailed particulars furnished by the Itinerant Instructors in Horticulture employed by the County Committee of Agriculure have also been utilised as a basis for this report.

The report on the condition of horticultural crops in England and Wales at 2nd July which has just been received from the Ministry of Agriculture and Fisheries, shows that in the case of apples of the Bramley's Seedling variety the position is as follows:—

Devon, 70-75 (30) ; Tamar Valley, 60-65 (30) ; Hereford, 65 (20) ; West Gloucester, 60 (20) ; North Gloucester, 70 (10) ; Evesham and Pershore area, 75 (25) ; West Sussex, 70 (50) ; East Sussex, 70 (36) ; Kent, 75 (40) ; Middlesex, 60 (25) ; Essex, 65 (10) ; Cambs., 66 (20) ; Wisbech and W. Norfolk, 70 (15) ; E. Norfolk, 70 (55) ; Lincs., (Holland), 95 (15).

The scale on which the index figures are based is as follows:—

25 or less—very bad. 26 to 35—bad. 36 to 45—poor.
46 to 55—fair. 56 to 65—very fair. 66 to 75—good.
over 75—very good.

The figures in brackets relate to the condition of the crops on 27th June, 1935.

CREAMERY MILK SUPPLIES.

In the Monthly Reports for June and December, 1935, the position of creameries under the Milk and Milk Products Act (Northern Ireland), 1934, was discussed, and figures were given showing how the creamery industry had benefited as a result of the granting of equalisation and bonus payments to producers. Equalisation payments have been paid to creamery suppliers since the 1st April, 1934, and it may now be of interest to measure the improvement which has taken place in the industry up to the end of March, 1936.

During this period the quantity of milk supplied to creameries for manufacturing purposes has shown a very substantial increase, as will be observed from the following table giving the gallonages supplied each month during the years 1933-34, 1934-35 and 1935-36 :—

Month.	1933-34.	1934-35.	1935-36.
	Gallons.	Gallons.	Gallons.
April	768,916	755,498	1,182,105
May	1,638,292	1,406,267	2,395,942
June	2,594,731	2,537,733	3,208,770
July	2,705,606	2,714,587	3,564,203
August	2,480,124	2,648,925	3,214,637
September ..	2,139,073	2,088,306	2,690,575
October	1,699,068	1,840,810	2,202,814
November ..	1,139,572	1,209,767	1,497,012
December ..	715,938	861,409	1,102,955
January	621,255	716,328	968,258
February ..	480,172	623,151	860,658
March	566,037	826,534	1,056,286
Total	17,548,784	18,229,315	23,944,215
No. of Creameries ..	109	106	108

The increase in supply during the winter months (October-March) has been particularly gratifying, the total gallonage in these months in 1935-36 being almost 50 per cent. greater than in the corresponding period in 1933-34 :—

	Increase in supply as compared with 1933-34.	
	1934-35.	1935-36.
	per cent.	per cent.
Summer Months (April-September) ..	— 1.4	31.9
Winter Months (October-March) ..	16.4	47.2
Full Year	3.9	36.4

The seasonality of supply will be more readily apparent from the following table in which the monthly gallonages are expressed as percentages of the total supply for the year :—

Month.	1933-34.	1934-35.	1935-36.
	%	%	%
April	4.38	4.14	4.94
May	9.33	7.71	10.01
June	14.79	13.92	13.40
July	15.42	14.89	14.89
August ..	14.13	14.53	13.43
September ..	12.19	11.46	11.23
October ..	9.68	10.10	9.20
November ..	6.49	6.64	6.25
December ..	4.08	4.73	4.61
January ..	3.54	3.93	4.04
February ..	2.74	3.42	3.59
March ..	3.23	4.53	4.41
Total	100.00	100.00	100.00

It will be noticed that in each of the three years under review, the supply increased steadily from April until July, then declined until February, and rose again in March. The percentages for each month over the three-year period correspond fairly closely, the differences being mainly due to varying climatic conditions. Broadly speaking, about two-thirds of the supply was produced in the summer period, April-September, and one-third in the winter period, October-March.

In the following table are given the numbers of farmers supplying milk to creameries and the average gallonage delivered each month during the period 1st April, 1934, to 31st March, 1936 :—

Month.	No. of Suppliers.		Average Gallonage.	
	1934-35.	1935-36.	1934-35.	1935-36.
April ..	11,320	14,515	68	81
May ..	13,636	18,040	103	133
June ..	16,835	21,223	151	151
July ..	18,542	21,509	146	166
August ..	18,466	21,462	143	150
September ..	17,294	21,150	121	127
October ..	17,645	20,971	104	105
November ..	16,843	20,006	72	75
December ..	15,382	18,270	56	60
January ..	15,159	16,997	47	57
February ..	13,544	15,649	46	55
March ..	13,511	15,581	61	68
Average per month ..	15,682	18,781	97	106

It will be noted that the number of suppliers in 1935-36 was considerably greater than in 1934-35, and also that the average quantity of milk delivered by each supplier showed an increase in 1935-36.

While it is generally known that the creameries are situated mainly in counties Antrim, Fermanagh and Tyrone, it may be of interest to set out the numbers of suppliers and the average gallonage delivered per supplier to creameries in each county during each month of the year ended 31st March, 1936 ;—

NUMBER OF SUPPLIERS.

Month.	Antrim	Armagh.	Down.	Fermanagh	L'derry.	Tyrone.	Belfast Co. Boro.	Total.
April,'35.	2,480	711		5,093	841	5,390		14,515
May	2,631	1,153	308	5,883	1,144	6,523	398	18,040
June	2,791	1,487	571	6,307	1,324	8,228	515	21,223
July	2,857	1,716	615	6,343	1,391	8,252	335	21,509
August	2,822	1,727	655	6,338	1,363	8,334	223	21,462
Sept.	2,730	1,668	533	6,330	1,330	8,334	225	21,150
Oct.	2,719	1,629	524	6,310	1,314	8,247	228	20,971
Nov.	2,641	1,509	487	6,155	1,192	7,807	215	20,006
Dec.	2,513	1,277	435	5,819	1,005	7,013	208	18,270
Jan., 1936	2,373	1,111	397	5,473	899	6,538	206	16,997
Feb.	2,199	1,021	367	5,052	785	5,998	227	15,649
March	2,247	1,004	366	5,081	831	5,833	219	15,581
Average for year	2,584	1,334	438	5,849	1,118	7,208	250	18,781

AVERAGE GALLONAGE DELIVERED PER SUPPLIER.

Month.	Antrim.	Armagh.	Down.	Fermanagh	L'derry.	Tyrone.	Belfast Co. Boro.	Northern Ireland
April, '35	117	56		71	81	79		81
May	147	98	93	130	134	133	203	133
June	171	121	133	158	158	145	138	151
July	179	135	136	170	161	165	202	166
Aug.	164	123	115	154	145	147	284	150
Sept.	142	103	120	134	117	120	281	127
Oct.	126	89	107	108	98	95	269	105
Nov.	99	67	93	69	71	69	226	75
Dec.	81	55	75	51	57	56	241	60
Jan., 1936	79	51	71	48	54	52	217	57
Feb.	75	52	79	44	53	51	210	55
Mar.	88	57	83	57	70	63	250	68
Average for year	125	89	104	103	106	102	218	106

The following table gives the average prices paid by creameries each month during the period 1st April, 1933, to 31st March, 1936, and also the amount of equalisation payment per gallon paid since the 1st April, 1934 :—

	Average price per gallon.			Amount of Equalisation Payment per gallon.	
	1933-34.	1934-35.	1935-36.	1934-35.	1935-36.
	d.	d.	d.	d.	d.
April	3.79	3.7	3.61	1.3	1.39
May	3.26	3.3	3.18	1.7	1.82
June	3.11	3.0	3.11	2.0	1.89
July	3.08	2.8	3.34	2.2	1.66
August ..	3.23	2.9	3.70	2.1	1.30
September ..	3.72	2.92	4.29	2.08	.71
October ..	3.99	3.01	4.86	2.99	1.14
November ..	4.20	3.34	4.86	2.66	1.14
December ..	4.37	3.68	5.29	2.32	.71
January ..	4.40	3.95	5.08	2.05	.92
February ..	4.35	4.06	5.15	1.94	.85
March ..	4.19	4.12	4.87	1.88	1.13
Average for year ..	3.56	3.18	3.99	2.15	1.33

The total average amount per gallon paid to suppliers in 1934-35 was 5.33d. as compared with 5.32d. in 1935-36. It will be observed that the prices paid by creameries in 1935-36 were substantially better than in 1934-35, due chiefly to improved returns for butter.

The numbers of gallons of each grade of milk supplied to creameries for manufacturing purposes from 1st February, 1935, to 30th April, 1936, were as follows:—

Month.	Grade A.	Grade B.	Grade C.	Grade D.	Total.
February, 1935 ..		708	86,576	535,867	623,151
March, 1935 ..		1,651	132,295	692,588	826,534
April, 1935 ..	938	3,549	230,815	946,803	1,182,105
May, ..	455	9,503	499,690	1,886,294	2,395,942
June, ...	394	13,360	677,377	2,517,639	3,208,770
July, ...	405	8,656	738,402	2,816,740	3,564,203
August, ..	437	4,358	706,567	2,503,275	3,214,637
September, ..	93	8,897	599,514	2,082,071	2,690,575
October, ..	337	13,717	510,819	1,677,941	2,202,814
November, ..	418	8,153	365,279	1,123,162	1,497,012
December ..	188	8,617	285,703	808,447	1,102,955
January, 1936 ..	264	6,594	276,231	685,169	968,258
February, ..	256	5,797	271,093	583,512	860,658
March, ..	322	8,580	371,014	676,370	1,056,286
Totals for period 1.4.35 to 30.3.36	4,507	99,781	5,532,504	18,307,423	23,944,215
April, 1936 ..	1,101	11,120	504,856	911,838	1,428,915

The significance of these figures will be more easily appreciated from the following table in which the gallonages, by grades, are shown as percentages of the total supply :—

Month.	Grade A.	Grade B.	Grade C.	Grade D.	Total.
	%	%	%	%	
February, 1935 ..		.11	13.90	85.99	100
March, 1935 ..		.20	16.01	83.79	100
April, 1935 ..	.08	.30	19.53	80.09	100
May, ..	.02	.40	20.85	78.73	100
June, ..	.01	.42	21.11	78.46	100
July, ...	.01	.24	20.72	79.03	100
August, ..	.01	.14	21.98	77.87	100
September, ..	.00	.33	22.28	77.39	100
October, ..	.02	.62	23.19	76.17	100
November, ..	.03	.54	24.40	75.03	100
December, ..	.02	.78	25.90	73.30	100
January, 1936 ..	.03	.69	28.52	70.76	100
February, ..	.03	.67	31.50	67.80	100
March, ..	.03	.81	35.13	64.03	100
Average for period 1.4.35 to 31.3.36	.02	.42	23.10	76.46	100
April, 1936 ..	.08	.78	35.33	63.81	100

At the commencement of the scheme the number of licensed producers supplying milk to creameries was about 900 : this number has now increased to approximately 3,500. Over the fifteen months' period the proportion of Grade C milk has risen from 13.9 per cent. to 35.33 per cent., while a slight upward tendency is also noticeable in the proportion of Grade B milk.

Suppliers of Grade A or Grade B milk to a creamery for manufacturing purposes are entitled to a bonus payment of 2d. per gallon ; while in the case of Grade C milk the bonus payment is 1d. per gallon. Equalisation payments, however, although made to creameries on a gallonage basis, are distributed among suppliers according to the butter-fat content of the milk delivered by them. The separated milk is returned to the suppliers and used for feeding to calves, pigs and poultry.

The total amounts paid to creamery suppliers in respect of the years 1934-35 and 1935-36 were approximately as follows :—

	1934-35.	1935-36.
	£	£
Paid by Creameries	242,362	397,935
Paid by Ministry :		
(*a*) Equalisation Payments ..	164,110	132,854
(*b*) Bonus Payments ..	932	23,922
Total ..	£407,404	£554,711

From the foregoing figures, certain of which are not yet final, it is abundantly clear that the Act has been responsible for a marked revival in the creamery industry and that the quality of the milk supplied to the creameries is steadily improving.

The period during which equalisation payments may be made has been extended until the 30th September, 1937.

THE MARKETING OF EGGS ACT (NORTHERN IRELAND), 1936,--- ITS AIMS AND EFFECTS.

This Act which has recently been passed by the Parliament of Northern Ireland marks a further stage in the efforts of the Government to develop the egg industry in Northern Ireland, and to maintain and improve the position won by Northern Ireland eggs upon the British market.

The Act has not yet come into operation, but it is expected that certain of the more important provisions will come into force before the end of the year. Such notice will, however, be given to all concerned as will enable them to comply with the new provisions.

In the first place, it should be pointed out that in the meantime the existing Marketing of Eggs Acts (Northern Ireland), 1924 to 1931 will continue in force, but, generally speaking, it may be taken that the new provisions are in addition to, and not in substitution for, the Marketing of Eggs Acts as now in operation.

MAIN OBJECTS OF THE ACT.

The two main objects of the Act are to provide—

(a) that egg producers shall be paid for their produce "on a quality basis" at prices fixed by the Ministry of Agriculture in accordance with advice given by a Statutory Committee; payment "on a quality basis" means that the producer will receive a higher price for eggs which are found on test to be "New Laid" than for eggs which are found to be "Seconds"; and

(b) that eggs shall, as a rule, be sold "on a quality basis" to the consumer in Northern Ireland.

Hitherto the Ministry's efforts in the matter of the marketing of eggs have been directed chiefly towards improving the position of Northern Ireland eggs on the British markets by ensuring that only clean fresh eggs in good condition are shipped to Great Britain. It has been found, however, that this improvement could be still further enhanced if steps could be taken which would have the effect of encouraging producers to sell only fresh eggs to the

wholesale dealers, or which would, in other words, discourage them from "holding over" their eggs in the hope of a rising market. At present producers are paid at a uniform rate whether their eggs are "New Laid" or not, and there is, therefore, every inducement for them to hold up supplies when prices show a tendency to rise. It is hoped, however, that payment "on a quality basis" will remove this inducement, and that shippers and those who sell eggs by retail will be assured of regular supplies of good quality eggs in a fresh condition.

As regards (b), retailers will, with certain exceptions, be required to label all eggs offered for sale as "New Laid" or "Seconds" and it will be an offence to sell as "New Laid" any egg which does not comply with the standard for "New Laid" eggs. This provision will afford a very effective safeguard to purchasers of eggs on the home market.

EGG MARKETING COMMITTEE AND FIXING OF EGG PRICES.

The Act provides for the setting up of an Egg Marketing Committee on somewhat similar lines to the Joint Milk Council and the Pig Industry Council. The Committee will consist of representatives of producers and licensed wholesale dealers and three independent members appointed by the Minister of Agriculture, one of whom will be chairman.

The main function of the Committee will be to advise the Ministry in regard to the prices which will be paid to producers by licensed wholesale dealers for "New Laid" eggs and "Seconds" respectively. These prices will have the force of law, and as a lower price will be fixed for "Seconds" than for "New Laid" eggs, producers may run a serious risk if eggs are held over in the hope that prices may rise. Whether eggs are "New Laid" or "Seconds" will be determined by test at the stores of the Class A dealers, and these tests will be carried out under the supervision of officers of the Ministry of Agriculture. The existing identification system provides the machinery whereby it is possible to identify any particular producer's eggs at the stores of the Class A dealer.

Similar arrangements for payment "on a quality basis" will apply to producers who sell to the larger retailers. Such retailers will, under the new Act, be required to test all eggs purchased from producers, and payment will be made to producers on the same basis as if their eggs had been sold to a wholesale dealer.

It will also be part of the duty of the Committee to advise the Ministry in regard to the granting of licences to wholesale dealers in eggs, and also to advise the Ministry generally in regard to the production and marketing of eggs and the encouragement of research, education and publicity in connection with the egg industry.

RETAIL SALES ON A QUALITY BASIS.

The Act also provides that, with certain exceptions which will be governed by regulations made by the Ministry of Agriculture, all eggs sold by retail must be sold on a quality basis, i.e., they must be sold under the designation "New Laid" or "Second", and it will be an offence for any person to sell as a "New Laid" egg any egg which does not comply with the standard prescribed for "New Laid" eggs. It is anticipated that the Ministry will exempt from this provision sales by the smaller retailers in provincial towns and villages.

LICENSING OF RETAILERS.

Under the new Act it will be necessary for every person who sells eggs by retail to hold a retailer's licence, unless the eggs sold are the produce of his own hens and ducks.

Holders of retailers' licences will fall into two classes. One will consist of the smaller retailers who do not sell more than a prescribed quantity per week. These will pay an annual fee not exceeding two pounds for their licence and will be relieved of all further responsibility for licence fees. The other retailers will pay a fee of ten shillings per annum, together with a fee of not more than a farthing per dozen in respect of each dozen sold by retail. Where eggs are purchased from a Class A dealer, arrangements may be made for the payment of the fee by him instead of by the retailer.

Licence fees will be paid into an Egg Marketing Fund, out of which will be paid contributions towards the costs of administering the Marketing of Eggs Acts, and towards any schemes which may be approved for research, education or publicity in connection with the production or marketing of eggs, or for the encouragement of egg consumption.

A further provision empowers the Ministry to prescribe the conditions under which eggs may be stored, prepared or exposed for sale by retail. The Ministry believes that the unsatisfactory condition of many of the eggs sold by retail is due to their having been kept under unsuitable conditions, i.e., exposed in shop windows or in shop fronts to the direct rays of the sun. It is hoped that under the new Act it will be possible to ensure that eggs are kept, pending their sale, in such conditions as will not conduce to their deterioration.

Finally, it may be said that those who have carried on their business in a proper manner will have nothing to fear from the operation of the new Act. On the contrary, they will find that, whereas hitherto they have not received any additional recompense for the extra trouble which they have taken, they will under the new arrangements receive better prices as compared with those who are not prepared to take the steps necessary for ensuring that only clean fresh eggs of good quality are sold by them.

Likewise, those wholesale dealers and retailers who have hitherto set themselves to provide their customers with eggs of the highest quality will find that the Act, by encouraging producers to market their eggs while they are in a fresh condition, will make it easier for them to maintain the high quality of their produce. It follows, too, that the consumer will be benefited, since in future he will be guaranteed that eggs purchased by him as "New Laid" are fresh and of good quality.

MARKETING SCHEMES.

AGRICULTURAL MARKETING (PIG INDUSTRY) ACT (N.I.), 1934:—

PIG PRICES FOR JULY, 1936.

The Pig Industry Council for Northern Ireland have announced the following prices for dead pigs sold by producers to curers in Northern Ireland in July, 1936. These prices are the same as those fixed for last month.

Weight Class. (Dead Weight)	Grade A.	Grade B.	Grade C.	U.L. or U.F.
I c.1.1.14 to c.1.2.14	60/–	57/–	54/–	51/–
II c.1.2.15 to c.1.3.14	60/–	57/–	54/–	51/–
III c.1.3.15 to c.2.0.0	57/–	54/–	51/–	48/–
IV c.2.0.1 to c.2.0.14	51/–	48/–	45/–	42/–

U.L.—Under Grade A measurements. U.F.—Over Grade C measurements.

The price for partly black pigs between c.1.1.14 and c.2.0.14 is 5/- per cwt. below the relevant grade price.

Authorised cuts:—

(a) Broken ham (dry, shank and/or shell bone break)—5% of the gross value of the carcase.

(b) Broken ham (wet break)—12½% of the gross value of the carcase.

(c) Shoulder-stuck carcase—3/- per shoulder affected.

The gross value of a carcase is the product of the dead weight and the relevant grade or other price per cwt.

Where portion of a pig carcase weighing between c.1.1.14 and c.2.0.14 is condemned and the existence of disease could not reasonably have been known to the producer at the time of slaughter the appropriate grade price shall apply. If the carcase is wholly condemned on account of disease, the existence of which could not reasonably have been known to the producer at the time of slaughter, the relevant Grade B price shall apply.

The foregoing prices do not apply in the case of (a) wholly black pigs, boars, rigs or stags, sucked sows, and pig carcases weighing under c.1.1.14 or over c.2.0.14 and (b) pigs visibly diagnosable as diseased before slaughter and subsequently condemned; emaciated or screw pigs; smelling pig carcases with definite indications of putrefaction and pig carcases badly abused or damaged before being handed over by the producer to the curer.

Prices for Wiltshire Pigs Sold on Direct Contract.

In the case of pigs sold alive under direct contract to Wiltshire curers the prices per dead cwt. payable for graded pigs delivered in respect of the month of July are as follows:—

Weight Class (Dead Weight)	Grade I.	Grade 2.	Grade 3.
Under c.1.0.14	54/–	54/–	54/–
c.1.0.14 to c.1.2.7	66/–	62/–	58/–
c.1.2.8 to c.1.2.10	63/–	59/–	55/–
c.1.2.11 to c.1.2.14	61/–	57/–	53/–
Over c.1.2.14	58/–	54/–	50/–

Prices for Live Pigs Sold to the Pigs Marketing Board.

The following prices per live cwt. will be paid for live pigs by the Pigs Marketing Board on and from July 1, 1936, until further notice:—

Weight Class (Live Weight)	Grade 1	Grade II.	Grade III.	Unsuitable.
c.1.2.0 to c.1.3.14	50/–	47/6	45/–	38/6
c.1.3.15 to c.2.0.0	46/–	43/6	—	38/6
c.2.0.1 to c.2.1.14	43/6	41/–	—	38/6
c.2.1.15 to c.2.2.7	41/–	38/6	—	35/6
c.2.2.8 to c.2.2.21	37/6	35/–	—	31/6

(The standard price, exclusive of bonus, for bacon pigs sold by contract in Great Britain during July is 11/4 per score dead weight, equivalent to 63/6 per cwt.)

These prices do not apply to live pigs outside the above weights, live pigs intended for breeding, live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, or live pigs sold (on contract registered with the Pig Industry Council) to curers in Northern Ireland. All other live pigs inside these weights can be sold only to the Board.

Authorised Deductions.

Every pig (dead or alive) sold to a curer or to the Pigs Marketing Board is subject to a levy and contribution at present amounting to 1/-.

In addition to this amount, a deduction not exceeding 6d. per pig may be made in the case of sales to curers to cover insurance, so that the producer will not suffer financial loss if the carcase is condemned as unfit for human consumption.

In the case of pigs sold to the Board, there is a deduction of 2/6d. per pig for marketing charges.

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration as calculated by the Ministry for the sixteen weeks' period ended 20th June, was 7/1. This price was used, together with the realised prices of bacon and hams and of fresh meats over a set period, to determine the standard price of pigs for July.

The ration upon which the feeding cost is based is as follows:—

Barley Meal	30%
Maize Meal	40%
Pollards (White)	20%
Extracted Soya Bean Meal	5%
Meat and Bone Meal (60% Protein) ...	5%

GRADING STATISTICS.

Table showing the percentages of pig carcases falling within the weight and grade classes indicated, during April, 1936.

Grade A.				Grade B.				Grade C.				Total
1	2	3	4	1	2	3	4	1	2	3	4	
19.06	12.90	1.41	.22	15.49	16.27	2.51	.52	6.00	8.35	.83	.17	83.73

UNGRADED CARCASES.

Under Grade A measurements. U.L.	Over Grade C measurements. U.F.	Wholly condemned. U1.	Wholly black, injured or damaged. U2.	Overweights, Underweights, boars, sows, etc. X.	Partly Black. Y.	
.03	3.63	.04	.68	11.86	.03	16.27
					Total	100%

The above figures have been calculated from a summary of the purchase and grading statements which the curers furnish to the Ministry.

The seasonal increase in the volume of trade noted in last month's report was maintained during May. There was a reduction in the standard price from 57/3 in April to 55/10 per cwt. in May; but the levy and contribution charges were reduced at the beginning of the latter month from 2/- to 1/- per head, and the average price of pork per cwt. for the month under review was 7d. less than in April at 54/8 per cwt. The average price per carcase also showed a reduction of 1/2 at £4 7s. 10d., while the average weight was unchanged at c.1.2.12.

The following table gives the result of an analysis of the purchase and grading statements furnished by Wiltshire bacon curers in respect of live pigs delivered on direct contract by producers during the month of May, 1936.

Weight Class.	Grade 1.	Grade 2.	Grade 3.	Unsuitable.	Total.
Under c.1.0.14	.22	.52	.07	.07	.88
c.1.0.14 to c.1.2.7	40.33	40.88	13.56	.04	94.81
c.1.2.8 to c.1.2.10	.33	.69	.95	—	1.97
c.1.2.11 to c.1.2.14	.22	.66	.55	—	1.43
Over c.1.2.14	.11	.50	.30	—	.91
Total	41.21	43.25	15.43	.11	100

The average price per cwt. in respect of these deliveries works out at 60/7 after making allowance for levy deductions. The average weight works out at c.1.1.15, the net average price per pig being £4 3s. 10d.

MILK AND MILK PRODUCTS ACT (NORTHERN IRELAND), 1934.

MARKING OF BOTTLES.

Representations have been made to the Ministry from time to time to the effect that the cost of selling milk in bottles is greatly increased by reason of the loss of bottles sustained as a result of pilferage and otherwise, and it has been suggested that if producers and distributors were not permitted to sell milk in any bottles other than the bottles belonging to them or bottles supplied to them by the persons from whom they purchase the milk, it might be possible to effect a very considerable diminution in the number of bottles lost and thus to reduce the distributive costs of selling bottled milk. The Ministry has, accordingly, after consultation with the Joint Milk Council, amended the Milk (Grade A) Regulations (Northern Ireland), 1934, the Milk (Grade B) Regulations (Northern Ireland), 1934, and the Milk (Grade C) Regulations (Northern Ireland), 1934, so as to provide that in future the following provisions shall have effect in regard to the marking of caps or discs and of bottles:

(a) Where milk is bottled on the producer's premises for subsequent sale by the producer, the cap shall bear the producer's name and address and the bottle may bear the same name and address but no other name or address;

(b) where milk is bottled on the producer's premises for subsequent sale by a distributor, the cap shall bear the name and address of the producer and the bottle may bear the name and address of either the producer or the distributor but no other name or address;

(c) where milk is bottled on a distributor's premises for subsequent sale by him, the cap shall bear the name and address of the distributor and the bottle may bear the same name and address but no other name or address;

(d) where milk is bottled on a distributor's premises for subsequent sale to another distributor, the cap shall bear the name of the distributor on whose premises the milk was bottled and the bottle may bear either that name and address or the name and address of the distributor to whom the milk is sold but no other name or address.

Copies of the new Regulations, which are entitled the Milk (Grade A) (Amended) Regulations (Northern Ireland), 1936, price 2½d. post free; the

Milk (Grade B) (Amended) Regulations (Northern Ireland), 1936, price 1½d. post free; and the Milk (Grade C) (Amended) Regulations (Northern Ireland), 1936, price 1½d. post free, may be obtained from H.M. Stationery Office, 80 Chichester Street, Belfast.

Accordingly, producers and distributors who handle bottled milk should satisfy themselves that they use for the purpose of their trade only bottles which comply with the above provisions, since otherwise they will not be complying with the Ministry's Regulations and the conditions subject to which they hold their licences. If it comes to the notice of the Ministry that licence holders are not complying with the aforementioned provisions the Ministry will not hesitate to take the most serious action in the matter.

MARKETING OF EGGS ACT (NORTHERN IRELAND), 1936.

The Minister of Agriculture has made an Order in pursuance of the powers conferred upon him by Section 17 of the Marketing of Eggs Act (Northern Ireland), 1936, appointing the 30th day of July, 1936, to be the appointed day for the coming into operation of such provisions of the Act as are necessary for the purpose of the establishment of the Egg Marketing Committee for Northern Ireland.

Copies of the Order may be purchased through any Bookseller or may be obtained directly from His Majesty's Stationery Office, 80, Chichester Street, Belfast.

THE EGG MARKETING COMMITTEE.

The Marketing of Eggs Act (Northern Ireland), 1936, makes provision, inter alia, for the establishment of an Egg Marketing Committee. This Committee is to consist of the following persons:

Three members appointed by the Minister of Agriculture, of whom such one as the said Minister may designate shall be the chairman of the Committee;

Five members being representatives of egg producers and appointed by the Ulster Farmers' Union, the Ulster Agricultural Organisation Society, the Northern Ireland Utility Poultry Society, and other prescribed societies (if any) in such manner, and according to such method of distribution as between the several societies, as the said Minister may from time to time determine.

Five members elected, in accordance with the prescribed regulations, by licensed wholesale dealers of Class A;

Two members elected, in accordance with the prescribed regulations, by licensed wholesale dealers of Class B.

Regulations governing the election of the 7 members to be elected by licensed wholesale dealers have been made and may be obtained through any

bookseller or direct from His Majesty's Stationery Office, 80 Chichester Street, Belfast. Under the Regulations the 14th day of August, 1936, has been fixed as the last day on which nominations may be received in the Ministry. Forms on which to nominate candidates may be obtained from the Secretary, Ministry of Agriculture, Stormont, Belfast. Voting papers will be despatched not later than the 31st August, 1936, to all licensed wholesale egg dealers entitled to vote in the election, and in order to count in the election must be returned properly completed so as to reach the Ministry not later than the 5th September, 1936. Further particulars regarding the election may be obtained from The Secretary, Ministry of Agriculture, Stormont, Belfast.

WHEAT ACT, 1932.

ADVANCE PAYMENT TO REGISTERED GROWERS ON ACCOUNT OF DEFICIENCY PAYMENTS FOR 1935-36.

In accordance with Byelaw 31 of the Wheat Byelaws 1932, the Wheat Commission have decided to make an advance payment to registered growers in respect of proper applications on valid wheat certificates not under query, delivered to the Commission since the 4th April, and on or before Friday, 26th June, 1936. This advance payment is on account of the deficiency payments that will become due under the Wheat Act for the cereal year ending 31st July, 1936. It will be made on or about Saturday, the 11th July, 1936, and will be at the rate of 2s. 9d. per cwt., equal to 12s. 4½d. per quarter of 504 lbs. Such balance as may become due will be paid in September, 1936. Until then no further payment will be made in respect of these certificates.

This payment will place growers who have delivered wheat certificates since the 4th April in the same position as those who received a payment on account in November, February or April.

CATTLE INDUSTRY (EMERGENCY PROVISIONS) ACTS, 1934 AND 1935.

The supplanting of the temporary scheme of assistance to the live stock industry by the Government's permanent measures is now in sight. The second of the above Acts extended the temporary arrangements to June of this year. An Order of June 15th extended them for another six months, and Parliament will be asked before the Summer Recess to pass a short measure extending them until, if necessary, the 31st July, 1937. Thus the permanent scheme should be in operation by mid-summer of next year.

The Government's long term policy was announced on July 6th. A sum not exceeding five million pounds a year will be available from the Exchequer for the making of subsidy payments, which are expected to make special provision for quality production. To offset in part the liability thus incurred

by the Exchequer, duties are to be imposed on imports of chilled, frozen and other descriptions of beef and veal from foreign countries. There will, however, be no duties on imported mutton and lamb, and it is not anticipated that retail prices will be affected.

The proposed maximum of five million pounds a year represents an increase in the total annual amount available for assistance of rather more than £1,000,000, and in addition no attempt has been made by the Government to recover the sums already paid.

THE CATTLE SUBSIDY.

From returns received recently from the Cattle Committee comparison is made between the numbers certified for the "beef subsidy" during the spring quarter of the 2nd year with the corresponding months of the first year during which the Acts were in operation.

The following were the figures:—

Month.	Steers.	Heifers.	Cow Heifers.	Total.
March, 1936 ..	9,923	2,762	284	12,969
„ 1935 ..	7,862	2,161	278	10,301
April, 1936 ..	8,736	2,565	339	11,640
„ 1935 ..	9,666	2,226	308	12,200
May, 1936 ..	7,122	2,077	311	9,510
„ 1935 ..	7,623	1,922	269	9,814
Total for Quarter, 1936	25,781	7,404	934	34,119
Total for Quarter, 1935	25,151	6,309	855	32,315

The total numbers of cattle certified throughout the whole of the United Kingdom during the same period were:—Quarter ended 31st May, 1936: 419,434; quarter ended 31st May, 1935: 407,069; and the percentages of Northern Ireland cattle of these totals were 8.13 and 7.94 respectively.

Comparing the totals for each quarter from year to year we find that as foreshadowed in the April, 1936 report, the number of cattle certified in Northern Ireland during the first three quarters of the second year of the subsidy exceeded the total for the first year. The following were the returns for each quarter.

Quarter ended		Quarter ended	
November, 1934 ..	20,438	November, 1935 ..	36,065
February, 1935 ..	27,382	February, 1936 ..	39,035
May, 1935 ..	32,315	May, 1936 ..	34,119
August, 1935 ..	27,653		
	107,788		109,219

It will be seen from the above figures that although there has been a considerably larger number of animals certified for the subsidy during the nine months ended May, 1936, compared with the nine months ended May, 1935, there was a decrease in the total for the third quarter of the second year approximately equal to the increase recorded at this period during the first year of the subsidy. The trend for the second year of the subsidy, however, is a more accurate illustration of the normal seasonal trade, the figures for the first year of the subsidy serving to show only the effect of the efforts of stock owners to obtain a larger share of payments.

The average prices per live cwt. of all cattle in respect of which payments have been made by the Cattle Committee are shown for the first five months of this year and the corresponding months of 1935.

	England and Wales		Scotland		Northern Ireland		United Kingdom	
	1936	1935	1936	1935	1936	1935	1936	1935
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ..	35.2	35.2	38.0	39.0	30.9	31.3	35.5	35.10
February ..	35.2	33.10	37.5	37.2	31.11	30.10	35.5	34.4
March ..	35.2	33.5	36.4	36.1	32.4	29.10	35.2	33.9
April ..	35.11	33.11	37.0	36.0	31.11	29.8	35.11	34.2
May ..	36.11	35.5	37.6	37.5	33.1	30.11	36.10	35.7

Examining the prices for Northern Ireland in conjunction with the number of cattle certified for the subsidy in this area during the spring months it will be realised that the value of the fat cattle sold off farms this spring was appreciably greater than a year ago.

Later returns received from the Cattle Committee show that the total payments made to Northern Ireland owners up to and including 4th July, 1936, amounted to £470,101 13s. 9d. and the total number of animals involved was 224,554. The average payment made per head of cattle was therefore £2 1s. 10½d.

Payments made to Northern Ireland cattle owners during the week ended 4th instant were in respect of 2,720 animals, including 1,948 steers, 678 heifers, and 94 cow-heifers. The total live weight of these animals was 21,955 cwt., and their total price £37,631 10s. 0d. The average price amounted to £13 17s. 0d. per head, and 34/3 per live cwt. The average weight of each beast was 8 cwt. 0 qrs. 8 lbs., and the average subsidy payment was therefore £2 0s. 4¼d.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

THE LAND.

Hay.—The saving of the hay crop will occupy most attention at this time. It should be remembered that the feeding value of hay depends largely on the time at which the crop is cut and on the way in which it is saved. In the case of upland hay not intended for seed saving, early cutting, when weather conditions permit, is recommended as over-ripened hay contains an excessive amount of woody or fibrous material and has, accordingly, a lower feeding value than hay which was cut before it is dead ripe.

Excessive exposure to rain and sun is also detrimental and causes losses of nutritious material. Every effort should, therefore, be made to prevent such losses by getting the hay into field ricks as soon as it is in a fit condition. These ricks should be carted to the stackyard as soon as possible after the hay has dried out sufficiently to permit of it being stacked with safety. In many cases the ricks are left too long in the fields resulting in a considerable quantity of the hay on the outsides and at the bottoms of the ricks becoming damaged and rendered either completely unfit for feeding purposes or greatly reduced in feeding value. Moreover, if the ricks are removed early from the fields, cattle can be turned on to make full use of the aftermath.

Hay intended for seed saving should not be cut, however, until fully ripe; if the hay is cut before it is properly ripened, the weight and quality of the seed may be materially reduced. It is a mistake to harvest crops of hay for seed which are not reasonably clean and free from weeds, and useless grasses such as Yorkshire Fog (" white " grass). Seed from inferior crops is of poor quality, as well as being low in quantity, and the returns obtained for such seed do not usually cover the extra expense of seed-saving, when the loss in the feeding value of the hay is added.

Potatoes.—The first spraying of potatoes to prevent blight, if not already given, should be applied without delay. Spraying is a preventive of blight, not a cure, so that the crop should be sprayed before any signs of disease appear.

The spray which has given such consistently good and reliable results in the past, namely, the Burgundy mixture, made by dissolving 8 lb. Copper Sulphate (blue-stone) in 35 gallons of water and adding to this a solution of 10 lb. washing soda in 5 gallons of water, is still unsurpassed as a preventive of blight, under Northern Ireland conditions. Experiments to determine the comparative efficacy of dry powders have shown that this treatment is not so consistently reliable as the Burgundy mixture, and, accordingly, the dusting

of the crops with fungicidal powders cannot be recommended except under extreme conditions where there is a practical difficulty in having wet spraying carried out.

It should be remembered that one spraying is not usually sufficient to afford continued protection against blight, and that a second spraying should be carried out in about three weeks' time after the first application has been given. During wet seasons a third spraying is necessary. Further particulars regarding the control of potato blight are given in Leaflet No. 50.

Potato growers are reminded of the importance of having the varieties pure. The presence of " rogues " in potato crops can be most readily detected when the plants are in flower and an effort should be made to remove any " rogues " which may be present. " Roguing " should be done thoroughly by digging the plants out completely and collecting all the tubers; even if a few tubers are left in the ground they are likely to get into the produce at digging time and may thus adulterate the seed for next year's planting and mean additional work of " roguing " next year, besides leading to trouble if potatoes for planting are sold.

Crops grown from healthy stocks of potatoes should also be examined now and any plants showing symptoms of diseases, such as leaf roll and mosaic, removed. This work is best carried out as early as possible as these diseases can be most readily recognised when the plants are young. Further, when any plants showing symptoms of these dieases are removed early, there is less risk of the disease spreading to adjoining plants.

Where applications to have potato crops inspected for the Ministry's Purity Certificates have not already been sent to the Ministry or to the local Potato Inspector, they should be sent in immediately. The possession of a purity certificate is of distinct advantage should the produce be sold for seed purposes. Lists of growers of certified crops will be published by the Ministry in due course.

Turnips.—The singling of crops of turnips should be carried out as soon as the plants can be separated readily; early thinning and reasonably close spacing (about 10 inches apart) assist in the production of heavy yields. Periodic cultivation after singling keeps weeds in check and assists the growth of the crop.

Weeds.—Readers are reminded of the advice given in last month's Report regarding the destruction of weeds. It is an offence under the Weeds' Act to allow weeds such as thistle, dock, ragwort (" ragweed " or " benweed ") and ox-eye daisy or " dog " daisy to produce seed on any part of the farm, and inspections are now being carried out by the Royal Ulster Constabulary to ascertain if such weeds have been cut. During showery weather, and when there is too much dew to permit of haymaking, suitable opportunities for weed

destruction are provided. Such times should be utilised to the full for this work. Prevention of seeding now will mean less weeding next year. A further reference to the destruction of weeds appears on page 42.

Persistent cutting is the most satisfactory method of destroying bracken. If these weeds are cut now, and again in about six weeks' time, the underground stems of the plants will be considerably weakened and infestations reduced.

Pasture.—Fields which have not been closely grazed and on which there is now a considerable amount of " shot " grass, will benefit greatly from top mowing. This encourages fresh bottom growth and at the same time destroys weeds. The suggestion that there would be a serious loss of pasture if the weeds growing amongst "shot" grass were cut is a fallacy. The cutting of the flowering stems of grasses when the weeds are being cut is a good practice and will improve the pasture.

A run of the chain harrow, when time permits, during the summer is also of considerable benefit to grassland; it spreads manure and thus prevents the development of clumps of coarse, unpalatable grass which grow in the neighbourhood of unspread manure deposited by grazing stock.

SEASONAL LIVESTOCK NOTES.

Cattle.—As the season advances, the feeding value of pastures decreases. The feeding of concentrates is, therefore, necessary to maintain the milk yield of the higher producing cows, except where first class pastures are available. A mixture of crushed oats, maize meal and decorticated earthnut cake is suitable for this purpose and economical to use at present prices of feeding stuffs. Examples of other suitable meal mixtures for feeding to dairy cows are given in Leaflet No. 16.

The provision of an adequate supply of clean water for all stock is particularly important during the summer months. Watering places should be inspected periodically and cleaned out, if necessary, so that an ample supply of fresh, clean water will be available. Calves being weaned from milk should have a constant supply of water, if good results are to be obtained. Where milk is being withdrawn, calves, even on good pasture, should receive an allowance of meals. A mixture of crushed oats, maize meal and bran, or even crushed oats alone, is suitable for this purpose.

Milk Production.—The attention of milk producers is directed to the care necessary in the handling of milk during warm weather so that its keeping qualities are not impaired. Cleanliness and efficient cooling after milking are the most essential factors in the production of milk which will keep sweet for reasonably long periods. These points of management are essential to ensure

that the milk is of the standards required. Useful information relating to the handling of creamery supplies of milk during the summer months is given on page 40 of this report and particulars regarding the production of clean milk are given in Leaflet No. 39.

Sheep.—Sheep flocks should be watched carefully at this time, particularly during damp, sultry weather, for attacks of the sheep-maggot fly. To aid in preventing attacks, the sheep should be kept as clean as possible. All dirty wool in the region of the tail and hind quarters should be clipped off. Since sheep which are scouring are very prone to attacks of maggots, the flock should not be changed suddenly to fresh pastures containing a high proportion of clover as, in such circumstances, scouring will likely occur. If attacks occur, the maggots should be rubbed out, using carbolic sheep dip to assist in dislodging the pests. Sores should be dressed finally with an ointment made up of powdered sulphur, mixed with either fresh lard or linseed oil.

Pigs.—From reports received it would appear that many pigs are affected with coughs; while this trouble is sometimes associated with lung worms, the most common cause is chronic bronchial pneumonia. It has been found that pigs which have suffered from anaemia or bloodlessness during the rearing stages are very liable to attacks of this form of pneumonia and, accordingly, the attention of farmers rearing pigs is directed to the importance of taking precautions to prevent anaemia in young pigs. A satisfactory method of preventing this ailment in young pigs is to paint the sow's udder, during the time she is suckling the pigs, with a solution of iron and copper salts mixed with treacle. The solution is made up by dissolving $3\frac{1}{4}$ ounces of ferric sulphate and $\frac{3}{4}$ ounce of copper sulphate crystals in 1 pint of warm water and adding this solution to 1 pint of treacle. The sow and young pigs should also be allowed out as much as possible on fresh, clean pasture, when weather conditions permit. Further particulars regarding the prevention of anaemia are given in Leaflet No. 45—" The Breeding and Rearing of Pigs."

A warning is again issued to pig feeders against the use of fish meal, cod liver oil and linseed cake meal in the rations for fattening pigs. Reports received by the Ministry indicate that in some districts sufficient care is not being taken in the choice of foods and that as a result, soft, oily, tainted bacon is being produced. The foods mentioned above will produce this type of bacon and their inclusion in the rations for fattening pigs cannot be recommended. The bad effects on the pig industry of producing bacon of inferior quality should be obvious to everybody and it is in the interests of all pig feeders to ensure that the rations they use are such as will produce bacon of the finest quality. See Leaflet No. 35 for suitable rations.

While cod liver oil in small quantities may be useful for young pigs, particularly during the winter months, its use for older pigs is neither necessary

nor economical. If separated milk is available there is no necessity to use any other protein supplement in pig rations, but if milk is scarce the most desirable substitutes in the case of fattening pigs are high grade meat meal and extracted soya bean meal. Linseed cake meal is both expensive and unsuitable for feeding to pigs intended for bacon. Meat meal and soya bean meal are cheaper than fish meal and their use instead of fish meal will cheapen the cost of producing bacon pigs.

SEASONAL GARDENING AND ORCHARD NOTES.

Celery.—Towards the end of July early white varieties of celery should be ready for the first earthing up. This work should be done when the plants are dry and the soil moderately so. The raising of the soil around the plants for the purpose of blanching them should be done on three or four occasions at intervals of from two to three weeks. Celery is a gross feeder and benefits from dressings of liquid manure. In order to control celery leaf blight disease the plants should be sprayed at intervals of from 14 to 21 days, from the time they become established in the trenches up to the end of September, with half-strength Burgundy mixture, that is:—

4 lb. Bluestone.
5 lb. Washing Soda.
40 gallons water.

The spraying must be thoroughly done, care being taken that the youngest leaves are well coated with the spray.

Other Vegetables.—Early in August, seeds of turnips of such varieties as Orange Jelly and Veitch's Red Globe should be sown, also seeds of cauliflower of the variety All-the-Year-Round, and seeds of Tripoli Onions.

The ground between growing crops of vegetables should be hoed frequently and the plants of winter vegetables moulded up before the foliage meets across the rows. This gives extra support to the plants for the winter.

Seed potatoes of the early varieties should be selected as the crop is dug.

Strawberries.—As soon as the crop of strawberries has been gathered the plantations should be cleared of all weeds, damaged foliage, straw, surplus runners etc. The ground between the plants should be dressed with a mixture of artificial manures and then lightly cultivated, working the soil up round the plants to encourage the development of strong crowns for next year. A suitable manurial mixture for average soil conditions is 1 cwt. sulphate of ammonia, 1 cwt. of sulphate of potash and 4 cwt. of superphosphate per statute acre. New plantations should be made as soon as possible. Leaflet No. 68 gives full particulars of the cultivation of strawberries.

Bush Fruits.—Raspberry and loganberry canes which have fruited this season should be cut out as soon as the fruit has been gathered. Old branches of black-currant bushes should also be removed as soon as the crop has been picked.

" Silver Leaf " Disease.—Where the disease known as " silver leaf " has attacked plum and damson trees the affected branches should be cut out before the end of August in all cases, and the general pruning of these trees should be carried out during the months of July and August. If done then there is little danger of healthy portions of the trees becoming infected with the disease as will be the case if pruning, or the removal of branches, is done during any other time of the year.

SEASONAL POULTRY-KEEPING NOTES.

Selection and Management of Breeding Stock.—Birds approaching the end of their first laying season, which are intended for breeding, should be examined now and only the best retained for breeding purposes. Only large-framed, good bodied birds, typical of their breed, and with plenty of stamina should be retained. Birds which show any defect, weakness or delicacy in constitution should not be selected for breeding no matter what their egg records may be. It is better to dispose of such for table purposes before moulting commences.

The birds selected for breeding should be encouraged to take a rest from laying, so that they may be in a suitable condition to produce good eggs for hatching early in the season. This may be done by giving them a complete change of ground and by feeding them on bulky, plain food, consisting largely of bran and containing no milk or other protein supplements, such as fish meal or meat meal. They should, for preference, be housed in slatted-floor houses, and any birds which go broody might be allowed to remain so for a reasonable period. The object should be to get the birds to moult and to have them through the moult and rested before eggs are required for hatching purposes. Useful information on the selection and management of breeding stock is given in Leaflets No. 29 and 83, respectively.

Management and Feeding of Pullets.—The importance of allowing the pullet flock to become fully matured and developed before laying commences may again be emphasised. Feeding and management influence development and it is to these factors that attention must be given if large-framed, vigorous birds, capable of withstanding the strain of winter egg production, are to be produced.

The food given to the growing pullets should be ample in quantity but not of a stimulating nature. A meal mixture of plain wholesome food and a daily feed of grain are satisfactory. A mash consisting of:—

3 parts by weight bran.
4 ,, ,, ,, sharps.
2 ,, ,, ,, Sussex ground oats.
1 part ,, ,, maize meal.
¼ ,, ,, ,, fish meal or meat and bone meal.

is suitable for this purpose. If the birds are ranging on good, fresh, young pasture the fish meal or the meat and bone meal may be omitted.

The pullets should be allowed ample range and adequate housing accommodation. Slatted-floor houses are ideal for housing growing pullets and the birds should be kept continuously on fresh ground by moving the house frequently.

Culling of Pullets.—The culling of pullets should be carried out from time to time so that any birds which show lack of vigour, poor physical development and any weakness whatever, may be removed and sold off for table purposes. It is not likely that such birds will ever be profitable as layers, and their removal from the flock will allow more housing accommodation for those birds which are to be retained. Birds which mature prematurely and commence laying at an early age should also be culled out and sold off. Such birds are small-bodied and usually lay a large number of small-sized eggs. They are not, therefore, economical egg producers, since their eggs are below commercial size; and, in addition, they may break down in health and die young as they have not sufficient stamina to maintain vigour and production.

Pests.—Parasites, such as red mite and lice, are liable to be a source of trouble in poultry houses during the summer months. These pests retard development in the case of young growing stock, and, if present in large numbers, cause a falling off in production from the laying flock. If red mites are present the houses should be thoroughly cleaned and an application of paraffin oil or of creosote given to the perches and their supports. In addition, an application of fresh limewash, to which paraffin has been added at the rate of ½ pint to each gallon of wash, to the insides of the house is beneficial. Lice can be conveniently destroyed by painting a narrow strip along the tops of the perches with nicotine sulphate about one hour before the birds go to roost, on two separate occasions, allowing an interval of 10 days between the first and second application. In the case of slatted-floor houses the painting of one slat in every three will be sufficient.

Care of Eggs.—The attention of readers is again directed to the care necessary in the handling of eggs at this time of the year in order that they may be marketed in as fresh a condition as possible. Frequent collection from the nests, storage in a cool place and marketing at least twice weekly, are essential. Allowing broody hens to sit on nests is a far too frequent cause of eggs deteriorating in quality. The broodies should be removed from the nests

immediately they become broody, and, if not intended for retention as breeders, placed in a coop and fed well. If this is done they will soon come into production again.

Turkeys.—Young turkeys should be run on fresh, clean pasture on which turkeys or other poultry have not ranged previously. This practice, as well as preventing outbreaks of diseases such as gapes, blackhead etc., also aids in rearing thrifty vigorous birds.

Green food in mashes for young turkeys can be dispensed with once the birds have got their red heads. From this time onwards they should be capable of foraging for much of their food and the number of meals can be reduced to three per day, but care should be taken to see that the birds go to roost with full crops. Particulars of suitable mashes for young turkeys are given in Leaflet No. 37.

ANNOUNCEMENTS AND REMINDERS.

GENERAL.

Greenmount College Scholarships.—Applications for scholarships to Greenmount Agricultural and Horticultural College should be lodged with the Secretary, County Committee of Agriculture before the 31st July next. A prospectus of the College, containing an application form, may be had free, on request. The next session begins on the 13th October.

Queen's University Scholarships.—Applications for the Ministry's scholarships in Agriculture, tenable at Queen's University, should be sent to the Ministry before the 15th August next.

Noxious Weeds.—The inspection work in connection with the destruction of noxious weeds, by the Royal Ulster Constabulary, is now in progress. All landowners are strongly urged to have all weeds destroyed in good time. Neglect to do so may lead to a prosecution.

Potato Crops Inspections.—The inspection of growing crops of potatoes for purity certificates is now in progress. Growers who wish to obtain these certificates should apply to the Ministry or to the local Potato Inspector immediately, if they have not already done so, to have their crops inspected.

Licensing of Bulls.—The inspections for the licensing of bulls will be carried out during August. Applications for inspections should reach the Ministry not later than the 31st July. Forms of application may be obtained from the Ministry or at any Police Barracks.

Blood Testing of Poultry.—Applications for the blood-testing of poultry to ensure freedom from Bacillary White Diarrhoea disease should be made to the Poultry Instructor for the district, or to the Secretary, County Committee of Agriculture, as soon as possible, and not later than 1st August next. As applications received after that date may not be attended to without considerable delay, it is important that all applications be made not later than 1st August next.

Accredited Poultry Farms.—A register of accredited poultry farms will again be issued this autumn. Copies of the conditions and application forms, and of the Scheme for the blood-testing of poultry, can be obtained free from the Ministry, on request.

Stormont Laying Test.—The laying test at Stormont provides an inexpensive means of determining the laying capacity of the birds on the farm and offers a unique opportunity to poultry-keepers of obtaining valuable information. Further, birds which qualify for copper rings at the test are eligible for entry at the official Breeding Station, Hillsborough, and in this way officially bred cockerels and pullets may be obtained. Entries of pens for the next test should be made not later than the 1st September. Copies of the rules of the test will be available soon, and may be obtained along with entry forms free, on request, from the Ministry or from the Poultry Instructor.

Sheep Dipping.—Sheep owners are reminded that the summer dipping period commenced on the 15th June last, and that all sheep must be dipped twice during the period from that date to the 15th August, allowing an interval of not less than seven days or more than fourteen days between the two dippings.

Leaflets.—Copies of the leaflets mentioned in this Report are obtainable, free on request.

Change in Staff.—Miss A. G. Pollock has resigned her position as Instructor in Poultry Keeping and Dairying under the County Antrim Committee of Agriculture, and the Committee has appointed Miss R. E. Dick, North-West School, Strabane, as her successor.

OFFER OF SCHOLARSHIPS.

SCHOLARSHIPS IN AGRICULTURAL SCIENCE.

The Ministry offers four valuable scholarships in Agricultural Science for competition in the autumn among young men in Northern Ireland. Each is of the value of £95 per annum, and is tenable for four years in the Faculty of Agriculture of the Queen's University of Belfast. Successful candidates are

afforded the opportunity of securing the most advanced training in Agricultural Science and obtaining, on conclusion of the course, the degree of Bachelor of Agriculture. The value of the scholarships enables the holders to pay their fees and retain a balance for upkeep purposes.

Candidates must be between the ages of seventeen and thirty on the 15th November, 1936, and must have passed the Matriculation examination of the University or its accepted equivalent.

Eligible applicants will be submitted by the Ministry to an examination, the object of which will be to test their knowledge of practical agriculture, or their knowledge of elementary science as applied to agriculture.

Further particulars may be obtained from the Secretary, Ministry of Agriculture, Stormont, Belfast, and the prescribed form of application for admission to the examination, duly completed, must reach the Ministry's offices not later than the 15th August, 1936.

SCHOLARSHIPS TO GREENMOUNT AGRICULTURAL AND HORTICULTURAL COLLEGE, MUCKAMORE, CO. ANTRIM.

Each County Committee of Agriculture in Northern Ireland offers for competition next August scholarships in Agriculture and Horticulture, tenable at this College for the session 1936/1937. One additional scholarship is also offered by the Royal Dublin Society under the terms of the Anne Hall Endowment Scheme to residents in Counties Fermanagh and Londonderry.

There are few, if any, more attractive opportunities offered to farmers' sons anywhere for procuring a sound training in agriculture than to the youth of Northern Ireland through the medium of these scholarships. The holders are entitled to free board, residence, and a thorough training in agricultural or horticultural subjects for ten months.

Greenmount College is situated about one mile from Antrim in a good agricultural district, and amidst pleasant surroundings. The College buildings, which are quite up to the standard of the best boarding schools in the country, are lighted throughout by electricity and are centrally heated; they provide accommodation for fifty students, who reside in the College. Classrooms, laboratories, etc., are set apart for the different subjects in which indoor instruction is given, and these are fully equipped with the necessary apparatus.

The farm attached to the College extends to 242 acres, and the students take part in all the operations connected with its working as a mixed tillage farm. They also receive practical instruction in poultry husbandry, dairying, veterinary hygiene, woodwork, vegetable growing, fruit cultivation and bee-keeping.

The course is primarily intended to give students a sound technical and practical knowledge of agriculture such as will be of very great use to them in their future careers as farmers. It also provides an excellent preparation for students desirous of competing for the University Scholarships in Agricultural Science which are referred to above.

Intending candidates should communicate immediately with the Secretary or Agricultural Organiser to the County Committee of Agriculture for the county in which they reside, with whom the prescribed form of application must be lodged before the 31st July next.

THE CABBAGE ROOT FLY.

This fly is common in Northern Ireland, and its maggots are one of the most destructive pests with which growers of cabbages, cauliflowers and related plants have to contend.

Description and Life History.—The fly is an ashy grey insect and not unlike the common house fly in general appearance. The female flies lay eggs close to the main stems of the plants and just below the soil surface towards the end of April or the beginning of May. In the course of from three to seven days the young maggots hatch from these eggs. The maggots, which are white or cream coloured, find their way to the small lateral roots of the plants, which they attack and destroy, resulting in growth being severely checked.

The first indication of attack is the flagging of the leaves of the plants during periods of bright sunshine. Later the main root may be invaded by the maggots and severely attacked plants die off. If an affected plant is pulled up, it will be noticed that most of the lateral roots have been eaten away, and the small maggots will be found both around the main root and in the soil from which the plant was pulled.

When the maggots are fully grown, which is in about three weeks from the time of hatching, they pupate and give rise to a second generation of flies. There are at least two generations of flies in the year. The maggots produced in the late summer remain over the winter as pupae in the soil, and give rise to the first brood of flies in the following year.

Control.—Recent experiments have shown that the most satisfactory method of controlling attacks is by the application of mercuric chloride (corrosive sublimate) solution to the soil around the young plants. One ounce of mercuric chloride should be dissolved in about a quart of hot water and the solution made up to 10 gallons by the addition of cold water. A quarter of a pint (about half a teacupful) of this solution should be poured around each plant between four and seven days after planting out. A second application should be given at a similar rate in about fourteen days after the first.

As mercuric chloride is extremely poisonous, the utmost care is necessary in its use. The solution, which should be made up in a wooden, earthenware, or glass vessel, and applied with a cup or glass, should not be left where stock of any kind have access to it. The vessels used in its preparation and application should either be destroyed after use, or washed thoroughly before being used for any other purpose. If washed, the washing water should not be thrown out where stock may have access to it.

The custom of leaving cut stumps of cabbages, etc., in the soil should be abandoned. These should be pulled up and burned. By this means large numbers of maggots, which otherwise would have given rise to fresh generations of the insect, will be destroyed. On land subject to attacks, cabbages and other related crops should not be grown on the same piece of ground in succession. A rotation of crops not only aids in preventing diseases and insect pests, but also enables a greater use to be made of the manurial reserves in the soil. For particulars regarding a suitable rotation of garden crops see Leaflet No. 67—" The Cultivation of Vegetables".

MILK SUPPLIES TO CREAMERIES.

During the recent warm weather great difficulty was experienced by many creamery suppliers in delivering milk to the creamery in good condition, and the quality of milk received by creameries suffered in consequence.

It is an offence under the Dairy Produce Act for creameries to accept stale or sour milk, or milk from cans which have not been properly cleaned. Now although most suppliers realise the importance of strict cleanliness and the consequences which result in the delivery of poor quality milk, there are possibly some factors which are contributing to these poor results which are not fully understood by the farmer, and attention to the following hints on handling and delivery may be found helpful:—

HANDLING ON THE FARM.

(1) The evening and morning milk should be delivered in separate cans, if possible.

(2) Where milk is mixed before delivery, warm milk should first be cooled before adding to milk from the previous milking.

(3) Evening milk should be cooled by immersing the can in cold water. Morning milk should, if possible, be similarly cooled before despatch to the creamery.

(4) Cans ready for delivery should be effectively protected from the sun on the farm and at collecting points. Where conditions on the roadside

are not good, the use of a clean cloth, saturated with cold water, to cover the churns will be found helpful.

DELIVERY TO THE CREAMERY.

(1) Suppliers should milk early and have milk ready for delivery in good time.

(2) Delivery must take place to the creamery regularly on each working day.

(3) Where milk is carted by the producer there should be no delay in delivering milk to the creamery.

(4) Where milk is carted by lorry or long cart, the churns should not be allowed to remain on the roadside for long periods before collection by the carter.

(5) One of the chief causes of trouble is due to careless methods of carting and delay on the part of the carter in collecting. Milk suppliers should insist on the carter calling punctually for milk, and, if the service remains unsatisfactory, arrangements should be made with other suppliers to have another carter appointed.

(6) The provision of a suitable cover for the cart during the summer months should be taken up with the creamery.

CARE OF MILK CANS.

(1) Cans containing separated milk should be emptied immediately on return to the collecting point or farmyard, and thoroughly washed and scalded.

The practice of allowing cans full of separated milk to remain on the roadside until evening, is one that should not prevail under any circumstances, for apart from the impossibility of cleaning the cans properly before the rush period of milking begins, the separated milk will likely turn sour and will not be as suitable for stock feeding as milk in a sweet condition. Troubles in calf rearing are often traceable to the use of milk which has been fed in a sour condition.

(2) Good results cannot be expected if cans and churns which are rusty inside, patched or broken, are used, and where such utensils are in use they should be replaced at once; the cost of new cans and churns will be well repaid by the better results.

CLEAN MILKING METHODS.

All producers who experience trouble should pay very careful attention to milking methods, and helpful advice can be obtained from the Ministry's Leaflet 39 on Clean Milk Production, copies of which can be obtained free, on application.

DESTRUCTION OF WEEDS.

All farmers and land owners are reminded that the campaign for the destruction of noxious weeds—including Thistle, Dock, Ragwort (benweed), and Ox Eye Daisy (dog daisy)—is now in full swing. The objects of the campaign and the harm caused by weeds are fully set out in the publication entitled "Wage War on Weeds" (Circular No. 7), copies of which have been distributed throughout Northern Ireland recently. Those who have not already seen this circular can have copies free on request from the Ministry of Agriculture, Stormont, Belfast.

As was the case in recent years, the inspection work in connection with the destruction of noxious weeds is again being done by the Police, and it should be understood that under the terms of the Weeds and Agricultural Seeds Acts (Northern Ireland), 1909 and 1929, persons who fail to destroy weeds growing on their lands are liable to prosecution. Apart from the risk of being prosecuted it is in the best interests of farmers to destroy noxious weeds in good time and before they seed. If the weeds are allowed to seed their destruction afterwards is a futile method of keeping them in check.

The best time for the destruction of weeds depends both on the character of the season and on the particular district concerned, but as a general rule the correct time is during the month of July. It is again emphasised that the weeds should be destroyed before they have had time to seed. Ox-eye Daisy, in particular, should be cut at once if this has not already been done, as this weed is now approaching the seeding stage.

The Ministry trusts that farmers, for their own welfare, will co-operate with the Royal Ulster Constabulary and with the Ministry in this very important matter of weed destruction throughout the Province, by seeing that all weeds growing on their land are destroyed in good time.

COMPULSORY LICENSING OF BULLS.

Owners of bulls which were born in July, August, September, October, November and December, 1935, must be in possession of licences for their animals by the 30th September, 1936, and applications for licences on the prescribed forms must reach the Ministry's offices not later than the 31st July, 1936. Farmers who have not yet applied for a licence should write immediately to the Ministry for application forms and a list of centres at which bulls will be inspected for licences.

It is understood that such forms and lists may also be procured at any police barracks. Every person who lodges on the prescribed form an application for a licence not later than the 31st July, 1936, will be notified by the Ministry regarding the actual place, date and hour appointed for the inspection of his bull.

REGISTRATION OF ACCREDITED POULTRY FARMS SCHEME.

Applications are invited from poultry breeders who desire to have their farms registered and who will undertake to comply with certain conditions designed to ensure that the birds on such farms are free from Bacillary White Diarrhoea disease. Copies of the conditions and forms of application may be had from the Secretary, Ministry of Agriculture, Stormont, Belfast.

The last date for the receipt of application forms, duly completed, will be 30th September, 1936.

SCHEME FOR THE BLOOD TESTING OF POULTRY FOR BACILLARY WHITE DIARRHOEA.

Poultry-keepers who desire to have birds blood-tested are reminded that early application should be made to the Instructor in Poultry-keeping for their county or district, and, in any case, not later than the 1st August next. Applications received after that date cannot receive the Instructor's attention until all previous applications have been dealt with. Copies of the Scheme, which gives full particulars regarding the conditions under which testing is carried out, fees, etc., and of the prescribed form of application, may be obtained from the Secretary, Ministry of Agriculture, Stormont, Belfast, or from the Instructor. The following is a list of the names and addresses of the Instructors in Poultry-keeping :—

Antrim (North) ..	Miss A. M. Nedwill	c/o. The Secretary, County Antrim Committee of Agriculture, County Courthouse, Belfast.
Do. (South) ..	,, R. E. Dick	
Armagh	Miss A. G. English,	c/o. The Agricultural Organiser, County Armagh Committee of Agriculture, Russell Street, Armagh.
Down (Mid) ..	Miss L. Walters	c/o. The Agricultural Organiser, County Down Committee of Agriculture, Northern Bank Chambers, May Street, Belfast.
Do. (South) ..	,, W. McMullen	
Do. (North) ..	,, E. F. Anderson	
Fermanagh ..	Miss A. M. Callery,	c/o. The Secretary, County Fermanagh Committee of Agriculture, Courthouse, Enniskillen.
Londonderry (North)	Miss E McCluggage	c/o. The Secretary, County Londonderry Committee of Agriculture, Courthouse, Coleraine.
Do. (South) ..	,, E. E. Clarke	
Tyrone (North) ..	Miss M. H. Davidson	c/o. The Secretary, Co. Tyrone Committee of Agriculture, Courthouse, Omagh.
Do. (South) ..	,, M. C. J. Davidson	

FOURTEENTH EGG-LAYING TEST AT STORMONT.

Results to the End of the Ninth Period.

The ninth period of four weeks ended on the 12th June, on which date three quarters of the full test period had been completed. Broodiness amongst the birds increased during the period and caused the usual seasonal decrease in egg production. The average production during the period, based on the number of birds originally penned, was 15.6 eggs per bird, as compared with an average of 18.3 eggs per bird during the preceding period. The average production of the birds in the last test was 15.7 eggs each during the ninth period.

In the table which follows is given the average egg production per bird during the ninth period, and for the nine periods this test has been in progress. The average production is shown, both on the basis of the 912 birds originally penned and on the basis of the 850 birds which were alive at the end of the period. Further, the table shows the average of the total number of eggs laid, and of the number of scoring eggs laid.

	Average egg production during the ninth period.		Average egg production during all nine periods.	
	Based on original flock of 912 birds.	Of the 850 birds alive on 12th June.	Based on original flock of 912 birds.	Of the 850 birds alive on 12th June.
Total number of eggs ..	15.6	16.78	139.4	145.6
Number of scoring eggs, *i.e.*, super grade and first grade ..	13.8	14.8	119.8	126.9

The following table gives the average production during the 36 weeks in respect of the birds of the different breeds represented. These averages are based on the total number of birds originally participating. The average percentage of super grade and of first grade eggs, i.e., scoring eggs, in the total production is also shown in the table for each breed.

Breed.	No. of Birds.	Average egg production for 36 weeks.	Percentage of super grade and 1st grade eggs.
White Wyandotte ..	288	139.9	84.2
White Leghorn ..	120	132.2	88.5
Rhode Island Red ..	420	144.2	88.0
Light Sussex	66	126.8	77.2
Barred Rock ..	6	131.0	72.3
Buff Rock ..	6	103.0	78.1
Welsummer ..	6	89.0	80.5

Twelve birds died during the ninth period. This brings the total number of deaths to 62, and makes a mortality rate of 6.8 per cent. over the 36 weeks of the test. The mortality rate in respect of the corresponding period of the previous test was 6.6 per cent. If four pens, in each of which more than two birds have died, be excluded, the rate of mortality in the present test to date is 5.4 per cent.

The mortality amongst the different breeds is shown in the following table:

Breed	No. of birds.	No. of deaths.	Percentage mortality.
White Wyandotte ..	288	28	9.7%
White Leghorn ..	120	13	10.8
Rhode Island Red ..	420	16	3.8
Light Sussex ..	66	3	4.5
Barred Rock ..	6	1	16.6
Buff Rock ..	6	1	16.6
Welsummer ..	6	—	—

The table which follows gives a picture of the position regarding mortality in the different sections of the test.

Section	No. of birds in section.	No. of deaths.	Percentage mortality.
1. White Wyandottes	180	20	11.1
2. White Leghorns ..	48	4	8.3
3. Rhode Island Red	228	3	1.3
4. Any other pure breed	84	5	5.9
5. (*a*) Stationholders' White Wyandottes	78	4	5.1
5. (*b*) Stationholders' White Leghorns ..	60	8	13.3
5. (*c*) Stationholders' Rhode Island Reds	132	7	5.3
6. Poultry Clubs ..	102	11	10.8

The extremely low rate of mortality amongst the Rhode Island Reds in Section 3 is a very gratifying feature. In this section, which comprises exactly one quarter of the total number of birds in the test, only three birds

have died; and, as will be seen from the table giving the average egg production of the different breeds, the production from the Rhode Island Reds is better than that from any of the other breeds.

The following are particulars of the leading pens in the different sections as at the end of the ninth period:—

SECTION 1.—WHITE WYANDOTTES (OPEN). 30 PENS.

Position.	No. of Pen.	Name and Address of Owner.	Numbers of eggs laid.			Test Score Value.
			Super Grade.	First Grade.	Below First Grade.	
1	3	Mrs. H. G. Darley, Trory, Ballinamallard, Co. Fermanagh.	526	414	83	940
2	11	Mr. J. Hall, Lilac Cottage, Donacloney, Co. Down.	812	121	13	933
3	7	Lieut.-Col. J. P. Galbraith, Clanabogan, Omagh, Co. Tyrone.	359	556	97	915

SECTION 2. WHITE LEGHORNS (OPEN). 8 PENS.

1	37	Mr. J. Waugh, Ballyrickard, Kilwaughter, Co. Antrim.	370	425	97	795
2	36	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down.	239	532	54	771
3	33	Mr. W. Gunning, Inglenook, Ballywalter, Co. Down.	403	328	202	731

SECTION 3. RHODE ISLAND REDS (OPEN). 38 PENS.

1	70	Miss R. L. Sinclair, Ballybirnie, Holyhill, Strabane, Co. Tyrone.	566	419	91	985
2	63	Mrs. D. Patterson, Ballycastle Road, Coleraine, Co. Londonderry.	489	453	27	942
3	39	Mrs. R. A. Abernethy, Cherry Hill, Stewartstown, Co. Tyrone.	584	350	149	934

SECTION 4. ANY OTHER PURE BREED. 14 PENS.

1	83	Mrs. H. W. Merrick, Agivey House, Aghadowey, Co. Londonderry.	513	293	58	806
2	82	Miss. C. C. Meara, Coalisland, Co. Tyrone	229	523	73	752
3	84	Mrs. J. W. Murland, Ardnabannon, Annsboro', Co. Down. (All Light Sussex).	407	300	141	707

SECTION 5 (a). WHITE WYANDOTTES (STATION-HOLDERS). 13 PENS.

Position.	No. of Pen.	Name and Address of Owner.	Numbers of Eggs laid.			Test score value.
			Super Grade.	First Grade.	Below First Grade.	
1	95	Mrs. R. M'Cullough, Bruslee, Ballyclare, Co. Antrim.	573	338	38	911
2	99	Mrs. M. Rodgers, Ballyginney, Dundrum, Co. Down.	589	321	99	910
3	94	Miss M. M'Allister, Backnamullagh, Dromore, Co. Down.	653	170	70	823

SECTION 5 (*b*). WHITE LEGHORNS (STATION-HOLDERS). 10 PENS.

1	108	Mrs. J. Knox, Shanmullagh, Ederney, Co. Fermanagh.	586	246	66	832
2	104	Mrs. W. Crawford, Redergan, Beragh, Co. Tyrone.	468	314	92	782
3	107	Mr. P. King, Leitrim, Banbridge, Co. Down.	583	194	12	777

SECTION 5 (*c*). RHODE ISLAND REDS (STATION-HOLDERS). 22 PENS.

1	120	Mrs. M. D. Bell, Woodview, Moneymore, Co. Londonderry.	629	346	49	975
2	118	Miss M. L. Fleming, Ballymenagh, Dungannon, Co. Tyrone.	570	356	42	926
3	125	Mrs. M. M'Clintock, Laymore, Ballymena, Co. Antrim.	364	551	113	915

SECTION 6. POULTRY CLUBS AND YOUNG FARMERS' CLUBS. 17 PENS.

1	149	Banbridge and District Poultry Club. (Rhode Island Reds.)	539	411	55	950
2	141	Ballyclare Poultry Club. (White Leghorns)	479	415	66	894
3	136	Ballywalter Young Farmers' Club. (White Wyandottes)	424	436	81	860

The "test score value" means the total of the super grade and first grade eggs. Eggs which weigh less than 2 oz. each are graded as "below first grade" throughout the entire test period.

The pen of Rhode Island Reds, entered by Miss R. L. Sinclair, which is leading in Section 3, retains the position of leading pen in the entire test, while the pen of the same breed entered by Mrs. M. D. Bell in Section 5 (c) and leading in that Section is second in the entire test. The pen occupying third place in the test is also of the Rhode Island Red breed; it is the pen entered by the Banbridge and District Poultry Club which is leading in Section 6.

All the eggs laid by 20 pens during the period were of super grade and first grade. Mr. Hall's pen of White Wyandottes (second in Section 1) has the distinction of having laid the highest number of super grade eggs. Of the 102 eggs laid by this pen during the ninth period, 98 were of super grade and 4 of first grade.

The pen of White Leghorns entered by Ballyclare Poultry Club, which occupies second place in Section 6, is the leading pen of the breed in the entire test.

Results to the End of the Tenth Period.

The tenth period ended on the 10th July, 1936. There was a further seasonal decline in egg production and an increase in the number of birds which were broody. The two birds remaining in Pen 16 and the three remaining in Pen 17 in Section 1 were removed from the test on the 22nd June and returned to their owner.

There were sixteen deaths during the period, including one from Pen 17. If these two pens are excluded from the calculation, the total number of deaths from the start of the test to the end of the tenth period is 71, which represents a mortality rate in respect of the 900 birds of 7.8 per cent. If Pens 16 and 17 are included, the number of deaths is 78 and the rate of mortality 8.5 per cent.

The following are particulars of the leading pens in each section as at the end of the tenth period :—

SECTION 1. WHITE WYANDOTTES (OPEN). 28 PENS.

Position.	No. of Pen.	Name and Address of Owner.	Number of eggs laid.			Test score value.
			Super Grade.	First Grade.	Below First Grade.	
1	11	Mr. J. Hall, Lilac Cottage, Donacloney, Co. Down.	908	123	13	1031
2	3	Mrs. H. G. Darley, Trory, Ballinamallard, Co. Fermanagh.	577	438	83	1015
3	26	Mr. R. Tolerton, Holborn Hall, Plantation, Lisburn, Co. Antrim.	578	418	97	996

SECTION 2. WHITE LEGHORNS (OPEN). 8 PENS.

1	37	Mr. J. Waugh, Ballyrickard, Kilwaughter, Larne, Co. Antrim.	437	455	100	892
2	36	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down.	266	605	85	871
3	31	Mrs. F. R. Browne, Lake View, Enniskillen, Co. Fermanagh.	503	328	101	831

SECTION 3. RHODE ISLAND REDS (OPEN). 38 PENS.

Position.	No. of Pen.	Name and Address of Owner.	Number of eggs laid.			Test score value.
			Super Grade.	First Grade.	Below First Grade.	
1	70	Miss R. L. Sinclair, Ballybirnie, Holy Hill, Strabane, Co. Tyrone	634	450	99	1084
2	63	Mrs. D. Patterson, Ballycastle Road, Coleraine, Co. Londonderry.	541	505	36	1046
3	39	Mrs. R. A. Abernethy, Cherry Hill, Stewartstown, Co. Tyrone.	654	390	152	1044

SECTION 4. ANY OTHER PURE BREED. 14 PENS.

1	83	Mrs. H. W. Merrick, Agivey House, Aghadowey, Co. Londonderry.	560	308	63	868
2	84	Mrs. J. W. Murland, Ardnabannon, Annsboro', Co. Down.	493	331	142	824
3	82	Miss C C. Meara, Coalisland, Co. Tyrone. (All Light Sussex).	271	551	82	822

SECTION 5(*a*). WHITE WYANDOTTES (STATION-HOLDERS). 13 PENS.

1	99	Mrs. M. Rodgers, Ballyginney, Dundrum, Co. Down.	649	342	100	991
2	95	Mrs. W. M'Cullough, Bruslee, Ballyclare, Co. Antrim.	600	374	45	974
3	94	Miss M M'Allister, Backnamullagh, Dromore, Co. Down.	709	182	71	891

SECTION 5(*b*). WHITE LEGHORNS (STATION-HOLDERS). 10 PENS.

1	108	Mrs. J. Knox, Shanmullagh, Ederney, Co. Fermanagh.	654	272	80	926
2	109	Mrs. M. Noble, Roundpark House, Killycramph, Lisnaskea, Co. Fermanagh	738	149	10	887
3	113	Mrs. J. Brown, Gorsebank, Culmore, Co. Antrim	574	309	90	883

SECTION 5(*c*). RHODE ISLAND REDS (STATION-HOLDERS). 22 PENS.

1	120	Mrs. M. D. Bell, Woodview, Moneymore, Co. Londonderry.	691	387	52	1078
2	118	Miss M. L. Fleming, Ballymenagh, Dungannon, Co. Tyrone	615	407	45	1022
	125	Mrs. M. M'Clintock, Laymore, Ballymena, Co. Antrim	429	593	115	1022
3	126	Mrs. R. M'Giffert, Rathcunningham, Toye, Downpatrick, Co. Down	687	306	91	993

SECTION 6. POULTRY CLUBS AND YOUNG FARMERS' CLUBS. 17 PENS.

Position.	No. of Pen.	Name and Address of Owner.	Number of eggs laid.			Test score value.
			Super Grade.	First Grade.	Below First Grade.	
1	149	Banbridge and District Poultry Club. (Rhode Island Reds)	585	476	59	1061
2	141	Ballyclare Poultry Club. (White Leghorns)	541	459	68	1000
3	136	Ballywalter Young Farmers' Club. (White Wyandottes)	466	461	81	927

The following pens were first, second and third, respectively, in the entire test at the end of the tenth period :—

Pen 70—Miss R. L. Sinclair, Rhode Island Reds—Score, 1,084 eggs.

,, 120—Mrs. M. D. Bell, Rhode Island Reds—Score, 1,078 eggs.

,, 149—Banbridge and District Poultry Club, R.I.R.—Score 1,061 eggs.

SCHOOL NEWS.

The second term of the year 1936 at the Ulster Dairy School, Cookstown, ended on the 19th June last. As a result of the examinations held at the end of the term, the following pupils, who had completed the ordinary School Course of three terms, were successful in qualifying for Certificates in Poultry-keeping, Dairying and Rural Housewifery :—

Miss E. Beggs, Crossgate, Milebush, Carrickfergus, County Antrim.
,, K. M. Corr, Whiterock Road, Belfast.
,, M. G. Dick, Heath Lodge, Belleek, County Fermanagh.
,, A. E. Green, Ballinavalley, Neills Hill, Belfast.
,, G. McBride, Ballyreagh, Ballyvoy, Ballycastle, County Antrim.
,, K. McCourt, Dublin Road, Newry, County Down.
,, T. A. McDermott, Drumskinney, Dromore, County Tyrone.
,, M. J. McIvor, Pomeroy, County Tyrone.
,, M. K. McKenna, Crosslands, Swatragh, County Londonderry.
,, M. G. Simms, Ballydougherty, Loughgilly, County Armagh.

Miss E. Beggs has been awarded a Scholarship which entitles her to a free place at the School for a further term to specialise in Dairying.

Pupils are now in residence at the School for the term which began on the 21st July.

Applications for admission for the next term which begins on the 13th October, are now being received by the Ministry. Girls intending to take a course of training are advised to send their applications to the Ministry as soon as possible, as applicants are admitted in the order in which their applications are received. There is no qualifying examination for admission. The prospectus of the School contains an application form, and copies of the prospectus may be obtained, free of charge, from the Secretary, County Committee of Agriculture, from the Poultry Instructor, from the Lady Superintendent, Ulster Dairy School, Cookstown, or from the Ministry of Agriculture, Stormont, Belfast.

FIXTURE LIST OF AGRICULTURAL AND HORTICULTURAL SHOWS.

Title of Society or Association.	Centre.	Date.
COUNTY ANTRIM.		
Cushendall Agricultural Association.	Cushendall	14th July
Glenarm and District Agricultural Society ..	Glenarm	15th July
Templepatrick Working Men's Association (Horticulture)	Templepatrick	21st August
North Antrim Horticultural Association ..	Ballymoney	27th August
Ballymena Horticultural Society	Ballymena	2–3rd September
Ulster Horticultural Society	Belfast	18th & 19th Nov.
CO. DOWN.		
Castlewellan Agricultural and Industrial Association	Castlewellan	16th July
Bangor Horticultural Society	Bangor	19–20th August
Waringstown Horticultural Society	Waringstown	28th August
Newtownards Horticultural Society	Newtownards	3rd September
CO. LONDONDERRY.		
Eglinton Gardening Society	Eglinton	23rd July
Garvagh Women's Institute	Garvagh	6th August
County Committee of Agriculture Sheep Show ..	Draperstown	7th August
County Committee of Agriculture Sheep Show and Dungiven Young Farmers' Club	Dungiven	11th August
Culmore Horticultural Society	Culmore	22nd August
Coleraine and District Horticultural Society ..	Coleraine	4th September
City of Derry and District Horticultural Society ..	Londonderry	9th September (Provisional)
CO. FERMANAGH.		
Fermanagh Farming Society	Enniskillen	2nd September
CO. TYRONE.		
Irish Goat Society	Trillick	15th July
County Committee of Agriculture Sheep Show ..	Plumbridge	22nd July
County Committee of Agriculture Sheep Show ..	Killeter	23rd July
Clogher Valley Agricultural Society	Clogher	29th July

PRICES OF FEEDING STUFFS.

The following table shows the average retail prices per cwt. of Feeding Stuffs at 1st July, 1936, with comparative figures for the corresponding date in 1935.

	1936.					1935.				
	Price per cwt.	Protein equivalent	Price per unit of protein equivalent	Starch equivalent	Price per unit of starch equivalent	Price per cwt.	Protein equivalent	Price per unit of protein equivalent	Starch equivalent	Price per unit of starch equivalent
STARCHY FOODS :	s. d.		s. d.		s. d.	s. d.		s. d.		s. d.
Maize (whole)	5 2¼	6.8	15 3	81.5	1 3	4 11	6.8	14 6	81.5	1 2
Maize Meal	5 7½	6.8	16 7	81.5	1 5	5 4	6.8	15 8	81.5	1 4
Bran, Red	7 0¼	10.0	14 0	45.3	3 1	6 8	10.0	13 4	45.3	2 11
Bran, White	8 4¼	10.0	16 8	45.3	3 8	7 9	10.0	15 6	45.3	3 5
Pollard, Brown	7 3¼	11.0	13 3	71.2	2 1	7 1	11.0	12 11	71.2	2 0
Pollard, White	8 2¾	11.0	15 0	71.2	2 4	7 10½	11.0	14 4	71.2	2 3
Barley Meal	7 2	6.2	23 2	69.7	2 1	7 9	6.2	25 0	69.7	2 3
Oats	5 5½	7.6	14 4	60.0	1 10	6 0½	7.6	16 10¾	60.0	2 2
Wheat (Whole)	7 9¾	9.6	16 3	72.0	2 2	—	9.6	—	72.0	—
PROTEIN FOODS :										
Linseed Cake, home-made ..	10 2	25.0	8 2	71.8	2 10	10 5	25.0	8 4	71.8	2 11
Linseed Cake, foreign	9 0¼	25.0	7 3	71.8	2 6	9 6	25.0	7 7	71.8	2 8
Linseed Cake Meal	9 4	25.0	7 6	72.8	2 7	9 10	25.0	7 10	72.8	2 8
Cotton Cake, decorticated ..	8 5½	35.0	4 10	71.2	2 5	8 11	35.0	5 1	71.2	2 6
Cotton Cake, undecorticated ..	—	17.0	—	39.2	—	6 3	17.0	7 4	39.2	3 2
Earth Nut Cake, decorticated ..	8 5½	41.0	4 2	73.0	2 4	8 6	41.0	4 2	73.0	2 4
Soya Bean Meal (extracted) ..	9 1½	38.0	4 10	64.0	2 10	8 9	38.0	4 7	64.0	2 9
Fish Meal (60% protein) ..	15 4	53.0	5 9	58.9	5 3	15 10½	53.0	6 0	58.9	5 5
Meat and Bone Meal (40% protein)	9 5½	36.2	5 3	44.0	4 3	9 7	36.2	5 4	44.0	3 7
Meat and Bone Meal (60%protein)	14 1	54.9	5 2	61.3	4 7	14 9	54.9	5 4	61.3	4 10
OTHER FEEDING STUFFS :										
Linseed, whole	15 5	19.0	16 3	119.2	2 7	15 9	19.0	16 7	119.2	2 8
Brewers' Grains (dried) ..	—	13.0	—	50.3	—	—	13.0	—	50.3	—
Palm Nut Cake	7 8	17.0	9 0	70.2	2 2	7 6	17.0	8 10	70.2	2 2
Palm Nut Meal	7 8½	17.0	9 1	78.0	2 0	7 7	17.0	8 11	78.0	1 11
Potatoes	2 6¼	0.6	84 0	18.0	2 10	2 11	0.6	97 3	18.0	3 3
Oat Straw	2 1	0.9	46 4	20.0	2 1	1 7	0.9	35 7	20.0	1 7
Meadow Hay	2 7	4.6	11 3	37.0	1 5	2 3	4.6	9 9	37.0	1 3

PRICES OF FEEDING STUFFS.

One of the objects of the foregoing table is to guide farmers in the economic purchase of feeding stuffs.

Ignoring their mineral content, the valuable constituents of any feeding stuff, whether home-grown or purchased, consist of:—

(1) Carbohydrates—a group of substances which include materials such as starch, sugar, etc. They supply heat or energy to the animal, and the surplus is stored by the animal as fat.

(2) Oil—which also provides heat or energy, the surplus being stored as fat. For this purpose oil is approximately 2½ times as valuable as the carbohydrates, but its presence in the ration in excessive quantities may lower the digestibility of the ration and cause digestive troubles.

(3) Protein—The group of bodies termed protein or albuminoids contain nitrogen. Protein is the only ingredient of a feeding stuff which can produce flesh or muscle, and hence its special importance.

All animals require a certain amount of each of the above constituents, but the relative amounts depend upon the class of stock. Thus, for example, a two-year-old fattening bullock requires a relatively small amount of protein (flesh forming material). Its ration should consist mainly of foods rich in carbohydrates, i.e., fat producing substances. On the other hand, a dairy cow is producing milk, which is a substance rich in protein, and as the protein, that is flesh forming material in milk, can only be derived from the protein in the food, the ration for the dairy cow must contain considerably more protein than that for the fattening bullock.

There are very wide differences in the composition of feeding stuffs, both home grown and purchased. Some, such as oats and maize, are rich in carbohydrates, and, therefore, particularly valuable for fattening purposes, whilst others, such as decorticated cotton cake, earthnut cake and linseed cake, are rich in protein, and are chiefly valuable for their flesh and milk-producing properties.

In the following table the composition of some of the more commonly used feeding stuffs is shown:—

PERCENTAGE COMPOSITION.

	Water.	Protein.	Oil.	Carbohydrates.
Turnips (Swedes)	88	1	0.2	9
Potatoes	75	2	0.1	21
Oat Straw	14	4	2	37
Meadow Hay	10	10	3	45
Pasture Grass	80	3.5	0.8	10
Cabbage	89	1.5	0.5	8
Fattening Foods :				
Oats	13	9	6	60
Maize Meal	12	10	4	70
Barley Meal	13	12	2	66
Flesh Forming Foods :				
Linseed Cake	11	30	10	35
Decorticated Cotton Cake	9	40	9	26

The farmer frequently asks what is the cheapest feeding stuff to buy. It is, however, often very difficult to give a direct answer. Much depends upon what the feeding stuff is required for, whether for fattening or milk production. Again, maize and oats are essentially fattening foods, whilst decorticated cotton cake is a flesh-forming food, and it would be just as futile to use the cost per ton to compare their values as it would be to use the cost per ton to compare the values of, say, sulphate of ammonia and superphosphate.

Foods of similar composition can, however, be compared, and it is possible for the enterprising farmer to effect considerable economies, not only in the use of home-grown feeding stuffs, but particularly in the purchase of concentrated feeding stuffs, by studying the market prices.

The starch equivalent figure is a measure of the energy, heat or fat producing value of the feeding stuff, and shows the number of pounds of starch which would be required to give the same heat or energy as 100 lb. of the feeding stuff. For example, the table on page states that the starch equivalent of maize meal is 81½, or, in other words, 100 lb. of maize meal will provide as much heat or energy as 81½ lb. of pure starch.

The protein equivalent figure shows the number of pounds of digestible flesh or muscle producing material in 100 lb. of each of the feeding stuffs listed.

PRICES OF FAT STOCK.

The following were the average prices per live cwt. of bullocks and heifers, sold at Belfast Auction Marts during each of the five weeks ended 30th June, 1936:—

Week ended.	Bullocks.	Heifers.
	s. d.	s. d.
2nd June ...	39 3 ...	38 9
9th June ...	37 6 ...	37 9
16th June ...	35 9 ...	36 3
23rd June ...	34 9 ...	34 6
30th June ...	34 9 ...	34 3

PRICES OF LIVE STOCK.

Average Prices of Live Stock at Fairs during the month of June, 1936.

Date	Fair.	Calves (under 9 months.)	Store Cattle.	Fat Cattle (18 months and over).	Springers		Milch. Cows.	Fat Lambs (under 12 months old).	Fat Sheep (over 2 years old).	Young Pigs.
					Cows.	Heifers.				
		Per Head	Per Cwt. Live Weight	Per cwt. Live wgt.	Per head	Per head	Per head	Per head	Per head	Per head
		£ s.			£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
2	Omagh ..	5 11/9	36/– to 39/–	33/–	14 10	14 0	13 10	†1 8/6	†1 12/6	—
5	Moy ..	—	31/6 to 40/–	35/6	14 17/6	11 7/6	14 10	†1 15	‡1 10	—
8	Irvinestown ..	6 5/9	35/– to 38/–	33/–	14 0	—	13 10	—	‡1 15	1 12/6
8	Limavady ..	—	27/– to 35/–	34/6	17 0	14 0	—	—	—	1 6/6
9	Dungiven ..	—	30/– to 34/6	33/–	14 10	12 0	—	—	—	1 6/6
10	Crossgar ..	—	34/– to 37/–	—	16 0	13 10	14 0	—	—	1 15
10	Enniskillen ..	5 0/6	26/– to 31/–	34/–	14 10	11 10	13 0	‡1 8	‡1 18	1 12/6
10	Kilrea ..	4 6/9	28/– to 33/–	33/6	14 0	11 0	12 0	—	†1 12	1 10
12	Ballygawley ..	—	30/6 to 36/6	34/–	14 10	11 10	13 15	—	†1 12/6	1 10
15	Camlough ..	4 10	23/– to 29/6	34/–	15 0	14 10	13 10	†1 8	†1 15	—
17	Lisnaskea ..	4 16/3	28/– to 33/6	33/6	14 10	14 10	13 0	—	—	1 13
17	Londonderry ..	—	28/– to 34/6	32/–	16 10	14 10	—	—	—	1 7/6
18	Ballymoney ..	5 10/9	33/– to 35/6	32/–	14 0	12 5	13 0	‡1 11	—	1 10
18	Ballynahinch ..	—	30/– to 33/–	—	15 15	13 10	14 0	†1 10	†1 12	1 15
20	Portadown ..	4 17/3	29/– to 33/–	31/–	16 0	14 0	16 0	—	—	1 12/6
22	Fintona ..	4 17/9	34/– to 36/–	34/–	14 5	13 15	14 0	†1 10	†1 8	1 10
22	Moneymore ..	4 2/6	27/– to 33/–	32/–	14 0	10 15	10 0	†1 8/3	†1 5	1 9/6
25	Antrim ..	6 17	32/– to 37/–	31/6	18 0	16 10	15 0	—	—	1 11
26	Castlederg ..	3 15	28/– to 32/–	31/–	13 15	—	—	†1 7/6	†1 10	1 7/6
26	Killylea ..	—	31/– to 33/6	31/6	15 10	—	14 15	—	—	—
27	Ballymena ..	5 18/6	22/6 to 34/–	—	19 10	19 5	18 0	—	—	1 12

† Downs and Cross. ‡ Long Wools.

IMPORTS AND EXPORTS.

Table showing the Imports and Exports through Northern Ireland ports of certain Agricultural Products during the month ended 31st May, 1936, and the five months ended 31st May, 1936, with comparative figures for the corresponding periods in 1935.

(These figures are supplied through the courtesy of the Ministry of Commerce and are subject to revision).

	IMPORTS.				EXPORTS.			
	Month ended 31st May.		Five months ended 31st May.		Month ended 31st May.		Five months ended 31st May.	
	1936	1935	1936	1935	1936	1935	1936	1935
Bacon .. .. cwt.	1,506	3,276	8,037	16,202	42,569	18,964	163,724	80,257
Hams .. .. cwt.	1,054	898	3,267	3,296	13,877	11,734	61,548	57,972
Pork .. .. cwt.	49	4	49	4	4,769	4,754	17,603	21,789
Butter .. .. cwt.	13,354	15,246	72,044	79,469	248	180	1,077	893
Eggs .. .. gt. hds.	6,633	7,690	38,855	33,387	653,021	476,063	1,606,407	1,600,204
Oat Products (inc. Oatmeal) cwt.	3,093	1,771	11,458	8,702	5,334	8,684	40,252	44,866
Potatoes .. .. tons	23	32	44	58	35,348	17,693	147,391	74,386
Poultry .. .. cwt.	5	13	118	70	10,422	7,780	92,070	87,986
Grass Seeds .. cwt.	867	4,282	6,383	32,770	55,570	21,631	254,358	213,209

There were no imports of oats direct from abroad either during the month of May, 1936, or in the corresponding period of last year.

SHIPMENTS OF LIVE STOCK.

Statement showing the Shipments of Live Stock from Northern Ireland ports during the following periods:—
Months of June, 1936, May, 1936, June, 1935,; six months ended 30th June, 1936, and 30th June, 1935.

PORTS OF :—	CATTLE.						SHEEP.				PIGS.			
	Fat.	Stores.	Milch Cows.	Springers.	Calves.	Total.	Fat.	Stores.	Lambs.	Total.	Fat.	Stores.	Total.	Horses
Belfast	4,931	3,840	1,621	268	—	10,660	—	—	14,681	14,681	2,656	6	2,662	714
Larne	21	2,590	—	18	—	2,629	—	—	5,656	5,656	679	51	730	60
Londonderry ..	75	6,140	37	30	987	7,269	22	—	4,843	4,865	280	—	280	15
Newry	—	321	2	—	—	323	—	—	245	245	—	—	—	—
Total, June, 1936 ..	5,027	12,891	1,660	316	987	20,881	22	—	25,425	25,447	3,615	57	3,672	789
Total, May, 1936 ..	5,109	16,484	1,046	206	2,759	25,604	280	—	9,657	9,937	3,317	104	3,421	923
Total, June, 1935 ..	5,494	15,213	1,203	451	2,684	25,045	78	—	20,097	20,175	3,191	341	3,532	726
Total, Six Months ended 30th June, 1936	43,289	91,219	6,785	853	11,969	154,115	6,284	—	36,072	42,356	23,845	345	24,190	3,206
Total, Six Months ended 30th June, 1935 ..	38,040	101,269	6,918	1,350	13,163	160,740	13,329	—	34,394	47,723	42,830	2,028	44,858	3,329

Table showing the numbers of Live Stock (1) exposed for sale, and (2) sold at 19 fairs in Northern Ireland during the months of June, 1935, and May and June, 1936.

Description of Live Stock.	June, 1935.		May, 1936.		June, 1936.	
	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.
Store Cattle ..	10,139	7,201	8,562	6,843	8,671	5,706
Fat Cattle ..	1,081	866	1,111	1,036	1,250	1,051
Dairy Cattle ..	1,306	994	1,202	967	1,326	1,082
Sheep	444	255	668	441	636	433
Lambs	950	790	273	211	1,292	1,094
Young Pigs ..	4,109	3,044	3,500	2,897	4,001	3,294

Trade in store cattle continued good up to the middle of last month when the demand became easier. Supplies were slightly larger than in May, and with trade slower in the second half of June, the volume of business showed a decline on the month. Recent high prices were fairly well maintained in the early part of the month, but later showed a general reduction except for first class stock. Supplies and sales of fat stock were slightly in excess of the previous month. The trend of trade was similar to that for store cattle. Prices which were firm at the beginning of June showed a general downward tendency to the end of the month. Trade for dairy cattle showed a distinct improvement especially in the latter half of last month. There was a brisk demand especially for best quality stock and prices generally moved upward. Good young cows and heifers were in request for the cross-channel markets and finished dearer on the month. The number of lambs exposed for sale in June was much larger than for the corresponding month in 1935, but prices began to decline with supplies exceeding the demand. The trade for other sorts of sheep was dull with prices tending easier. Young pigs were in fairly brisk request at fully late rates.

This report will be sent free monthly as issued on application being made to the Secretary, Ministry of Agriculture, Stormont, Belfast.

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MINISTRY OF AGRICULTURE.

List of Leaflets and other Publications.

LEAFLETS.

No. 1. Flax Seed, 1936.
" 2. Improvement of Farm Poultry.
" 3. Feeding for Egg Production.
" 4. Marketing of Eggs.
" 5. The Dishorning of Calves.
" 6. The Packing of Apples in Standard Boxes.
" 7. Potato Trials.
" 8. Seed Testing for Farmers.
" 9. The Renovation of Orchards.
" 10. Fruit Tree Pests—Capsid Bugs.
" 11. Fruit Tree Pests—Aphides and Apple Sucker.
" 12. Fruit Tree Pests—Caterpillars.
" 13 Contagious Abortion in Cattle.
" 14. Cheese-making on the Farm.
" 15. Suitable Varieties of Fruit.
" 16. The Feeding of Dairy Cows.
" 17. Home Bottling of Fruits and Vegetables.
" 18. Marketing of Dead Poultry.
" 19. How to Feed Linseed.
" 20. The Hatching and Rearing of Chickens.
" 21. The Uses and Advantages of Portable Poultry Houses.
" 22. Leather-Jacket Grubs.
" 23. The Handling and Care of Wool.
" 24. Fluke in Sheep.
" 25. The Rearing and Management of Young Horses.
" 26. Ordnance Survey Maps for Farmers.
" 27. How to Keep Eggs Clean
" 28. The Construction of a Laying House for Poultry.
" 29. The Selection and Breeding of Laying Hens.
" 31. Coccidiosis in Poultry.
" 32. Roup of Poultry (Fowl Pox).
" 33. Spraying Calendar for Apple Orchards.
" 34. The Pruning of Apple Trees.
" 35 The Fattening of Pigs.
" 36. Advantages of Milk Recording.
" 37. The Raising and Fattening of Turkeys.
" 38. The Destruction of Charlock.
" 39. The Production of Clean Milk.
" 40. The Laying Down and Management of Temporary Pastures.
" 41. Blackleg, Blackquarter or Quarterill.
" 42. The Purchase of Balanced Rations for Dairy Cows.
" 43. Tuberculosis in Poultry.
No. 44. Results of Crop Experiments, 1935.
" 45. The Breeding and Rearing of Pigs.
" 46. Hints for Winter Egg Production.
" 47. The Care and Management of Sheep.
" 48. Baby Beef Production.
" 49. American Gooseberry Mildew.
" 50. Potato Blight.
" 51. Butter-making on the Farm.
" 52. Gapes in Chickens.
" 54 The Breeding and Rearing of Calves.
" 55. Destruction of Ragwort or Benweed.
" 56. Identification of Egg Supplies.
" 57. How to have Eggs of First Quality.
" 58. How the Fertilisers and Feeding Stuffs Act benefits the Farmer.
" 59. Bacillary White Diarrhoea (Pullorum Disease).
" 60. Advantages of Winter Agricultural Classes.
" 61. The Care and Management of Breeding Bulls.
" 62. The Production of Timber on the Farm.
" 63. Sheep—Castration, Docking, Foot-Rot and Care of Feet.
" 64. The Destruction of Warble Fly Maggots in Cattle.
" 65. The Packing of Apples in Barrels.
" 66. Seed Testing Facilities for Traders.
" 67. The Cultivation of Vegetables.
" 68. The Cultivation of Strawberries.
" 69. The Construction of Piggeries.
" 70. Ringworm.
" 71. The Cultivation of Raspberries.
" 72. Tree Planting for Shelter and Ornament.
" 73. The Propagation and Maintenance of Healthy Stocks of Potatoes.
" 74. New Pure Strains of Flax.
" 75. Pig Production and the Pigs Marketing Scheme.
" 76. Acarine (Isle of Wight) Disease of Bees.
" 77. Licensing of Milk Producers and Distributors.
" 78. Graded Milk.
" 79. The Picking and Storing of Apples.
" 80. Hoose or Husk in Farm Stock.
" 81. The Construction of Cow Houses.
" 82. White Scour in Calves.
" 83. The Care, Management and Feeding of the Poultry Breeding Stock.

Any of the above leaflets may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

CIRCULARS.

No. 1. Phosphatic Fertilisers.
" 5. Why Pay a Tax on the Horns of Cattle ?
" 8. Basic Slag.
" 9. Smut in Oats.
" 10. Purchase of Fertilisers and Feeding Stuffs.
" 11. Fertilisers and Feeding Stuffs Act—General Summary.
" 12. The Treatment of Liver Fluke.
" 13. The ox-Warble Fly.
" 306. Fertilisers and Feeding Stuffs Act, 1926—Revision of Regulations.

MISCELLANEOUS PUBLICATIONS.

Store Cattle.
Reports on Egg-Laying Tests.
Crop Insurance.
List of Growers of Certified Crops of Immune Varieties of Potatoes.
List of Growers of Certified Crops of Non-Immune Varieties of Potatoes
The Ministry's Monthly Report.
Register of Premium Stallions.
Guide to the Live Stock Breeding Act (Northern Ireland), 1922.
Guide to the Marketing of Fruit Act (Northern Ireland), 1932.

Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street, Belfast, at the prices stated :—

(1) The Annual Report of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
(2) Annual Report upon the Agricultural Statistics of Northern Ireland. Price 2/- net.
(3) The Journal of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
(4) The Agricultural Output of Northern Ireland, 1925. Price 2/6 net.